



SERVICE MANUAL

4-CHANNEL RECEIVER

SANSUI QRX-8001/9001



Sansui

SANSUI ELECTRIC CO., LTD.

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1. SPECIFICATIONS

AUDIO SECTION

<QRX-8001>

POWER OUTPUT

Min. RMS. four channels driven, from 20 to 20,000Hz, with no more than 0.3% total harmonic distortion

40 watts per channel into 8 ohms

40 watts per channel into 4 ohms

Min RMS four channels driven at 1,000Hz with no more than 0.3% total harmonic distortion

43 watts per channel into 8 ohms

43 watts per channel into 4 ohms

Min. RMS. both channels driven from 20 to 20,000Hz, with no more than 0.3% total harmonic distortion and SPEAKERS/MODE switch at 2-CH A (POWER \times 2)

100 watts per channel into 8 ohms

Min RMS both channels driven at 1,000Hz with no more than 0.3% total harmonic distortion and

SPEAKERS MODE switch at 2-CH A (POWER \times 2)

110 watts per channel into 8 ohms

<QRX-9001>

POWER OUTPUT

Min. RMS. four channels driven, from 20 to 20,000Hz, with no more than 0.3% total harmonic distortion

60 watts per channel into 8 ohms

60 watts per channel into 4 ohms

Min RMS four channels driven at 1,000Hz with no more than 0.3% total harmonic distortion

65 watts per channel into 8 ohms

65 watts per channel into 4 ohms

Min. RMS. both channels driven, from 20 to 20,000Hz, with no more than 0.3% total harmonic distortion and SPEAKERS/MODE switch at 2-CH A (POWER \times 2)

120 watts per channel into 8 ohms

Min RMS both channels driven at 1,000Hz with no more than 0.3% total harmonic distortion and

SPEAKERS MODE switch at 2-CH A (POWER \times 2)

140 watts per channel into 8 ohms

<QRX-8001> <QRX-9001>

LOAD IMPEDANCE

SPEAKERS/MODE Switch at 2-CH—A, 4-CH—A and 4-CH—B
..... 4 and 8 ohms

SPEAKERS/MODE switch at 2-CH—A(POWER \times 2) and 4-CH—A+B
..... 8 ohms

POWER BANDWIDTH..... 20 to 20,000Hz at or below
rated min. RMS power output
and total harmonic distortion

TOTAL HARMONIC DISTORTION

..... less than 0.3% at or below
rated min. RMS power output

INTERMODULATION DISTORTION (70Hz: 7kHz 4:1 SMPTE
method)..... less than 0.3%

FREQUENCY RESPONSE (at 1 watt)
..... 20 to 30,000Hz \pm 1dB

RIAA CURVE DEVIATION (PHONO)

..... \pm 1.0dB, $-$ 1.0dB (30Hz to 15kHz)

DAMPING FACTOR..... approximately 30 at 8-ohm load

INPUT SENSITIVITY AND IMPEDANCE

(1kHz, for rated power output)

PHONO (2-channel) 2.5mV/50 kilohms

(Max. input capability: 150mV at 1kHz, less than 0.3%
total harmonic distortion.)

TAPE PLAY (pin jacks) 100mV/50 kilohms

TAPE-1 REC/PLAY (DIN socket)

..... 100mV/50 kilohms

AUX 100mV/50 kilohms

MIC..... 4mV/10 kilohms

RECORDING OUTPUT

TAPE REC (pin jacks) 100mV

TAPE-1 REC/PLAY (DIN socket)

..... 30mV

CHANNEL SEPARATION (at rated output 1kHz)

PHONO better than 45dB

TAPE PLAY, AUX better than 45dB

HUM AND NOISE

PHONO better than 70dB

TAPE PLAY, AUX better than 80dB

CONTROLS

BASS	±10dB (50Hz)
TREBLE	±10dB (10kHz)
LOUDNESS	+8dB (50Hz)
	+3dB (10kHz)
LOW FILTER	-10dB (50Hz)
HIGH FILTER	-10dB (10kHz)
AUDIO MUTING	-20dB

4-CHANNEL DECODER SECTION

QS DECODER (Type-A QS vario-matrix)*

SEPARATION	20dB between adjacent channels
	30dB between diagonal channels
DISTORTION	less than 0.1% (at 1kHz)
FREQUENCY RESPONSE	20 to 30,000Hz

QS SYNTHESIZER (Type-A QS vario-matrix)

SEPARATION	equivalent to QS decoder
DISTORTION	equivalent to QS decoder
FREQUENCY RESPONSE	equivalent to QS decoder

SQ FUNCTION (Phase Matrix)**

SEPARATION	20dB (left front to right front)
	12dB (center front to center back)

CD-4 DEMODULATOR***

INPUT SENSITIVITY	2.5mV
INPUT IMPEDANCE	50 kilohms
SEPARATION (Standard test signal at 1kHz)	
.....	40dB (left to right)
.....	25dB (front to back)
FREQUENCY RESPONSE (Standard test signal at REC output)	
.....	30 to 15,000Hz (main-channel)

<QRX-9001 Only>

DOLBY NOISE REDUCTION EFFECT†

.....	10dB (above 5kHz)
-------	-------------------

FM SECTION

<QRX-8001>

TUNING RANGE	88 to 108MHz
USABLE SENSITIVITY (IHF)	10.8dBf (1.9μV)
(DIN)	1.1μV
	(1kHz, Modulation 30%, S/N 26dB)

50dB QUIETING SENSITIVITY

STEREO (IHF)	38dBf (45μV)
MONO (IHF)	16dBf (3.5μV)

TOTAL HARMONIC DISTORTION

STEREO	less than 0.5% (1kHz)
MONO	less than 0.4% (1kHz)

SIGNAL TO NOISE RATIO

STEREO	better than 60dB
MONO	better than 65dB

ALTERNATE CHANNEL SELECTIVITY

.....	better than 60dB (±400kHz)
-------	----------------------------

CAPTURE RATIO

.....	less than 2.2dB
-------	-----------------

AM SUPPRESSION

.....	better than 50dB (98MHz)
-------	--------------------------

IF RESPONSE RATIO (IHF)

.....	better than 75dB (98MHz)
-------	--------------------------

SPURIOUS RESPONSE RATIO (IHF)

.....	better than 70dB (98MHz)
-------	--------------------------

SPURIOUS RADIATION

.....	less than 34dB
-------	----------------

STEREO SEPARATION

.....	better than 30dB (100Hz)
.....	better than 40dB (1kHz)
.....	better than 25dB (10kHz)

FREQUENCY RESPONSE (IHF)

.....	+1.0dB, -3.0dB (30 to 15,000Hz)
-------	---------------------------------

ANTENNA IMPEDANCE

.....	75 ohms unbalanced
.....	300 ohms balanced

<QRX-9001>

TUNING RANGE

.....	88 to 108MHz
-------	--------------

USABLE SENSITIVITY (IHF)

.....	10.3dBf (1.8μV)
(DIN)	1.0μV
	(1kHz, Modulation 30%, S/N 26dB)

50dB QUIETING SENSITIVITY

STEREO (IHF)	38dBf (45μV)
MONO (IHF)	15.6dBf (3.3μV)

TOTAL HARMONIC DISTORTION

STEREO	less than 0.4% (1kHz)
MONO	less than 0.3% (1kHz)

SIGNAL TO NOISE RATIO

STEREO	better than 65dB
MONO	better than 70dB

ALTERNATE CHANNEL SELECTIVITY

.....	better than 80dB (±400kHz)
-------	----------------------------

CAPTURE RATIO

.....	less than 1.5dB
-------	-----------------

AM SUPPRESSION

.....	better than 50dB
-------	------------------

IMAGE RESPONSE RATIO (IHF)

.....	better than 75dB (98MHz)
-------	--------------------------

IF RESPONSE RATIO (IHF)

.....	better than 95dB (98MHz)
-------	--------------------------

AM SECTION

<QRX-8001, QRX9001>

TUNING RANGE	535 to 1,605kHz
SENSITIVITY (Bar antenna)	50dB/m (1,000kHz)
SELECTIVITY	better than 35dB (1,000kHz)
IMAGE RESPONSE RATIO (IHF)	better than 35dB (1,000kHz)
IM RESPONSE RATIO (IHF)	better than 30dB (1,000kHz)

OTHERS

<QRX-8001>

POWER REQUIREMENTS

POWER VOLTAGE	100, 120, 220, 240V 50/60Hz
	120V (Usable 110—130V)
	60Hz (for U.S.A. & Canada only)

POWER CONSUMPTION

MAXIMUM CONSUMPTION

.....	550 watts
-------	-----------

RATE CONSUMPTION

.....	370 watts (430 VA)
-------	--------------------

DIMENSIONS

.....	600mm (23 ⁵ / ₈ " W
.....	174mm (6 ⁷ / ₈ " H
.....	415mm (16 ³ / ₈ " D

WEIGHT

.....	23.6kg (52.0 lbs) net
.....	26.4kg (58.2 lbs) packed

<QRX-9001>

POWER REQUIREMENTS

POWER VOLTAGE	100, 120, 220, 240V 50/60Hz
	120V (Usable 110—130V)
	60Hz (for U.S.A. & Canada only)

POWER CONSUMPTION

MAXIMUM CONSUMPTION

.....	860 watts
-------	-----------

RATE CONSUMPTION

.....	580 watts (675 VA)
-------	--------------------

DIMENSIONS

.....	600mm (23 ⁵ / ₈ " W
.....	174mm (6 ⁷ / ₈ " H
.....	415mm (16 ³ / ₈ " D

WEIGHT

.....	23.0kg (50.7 lbs) net
.....	25.8kg (56.9 lbs) packed

* QS is a trademark of Sansui.

** SQ is a trademark of CBS, Inc.

*** CD-4 is a trademark of JVC, Inc.

† The word "Dolby" and the Doable-D symbol are a trademark of Dolby Laboratories Inc.

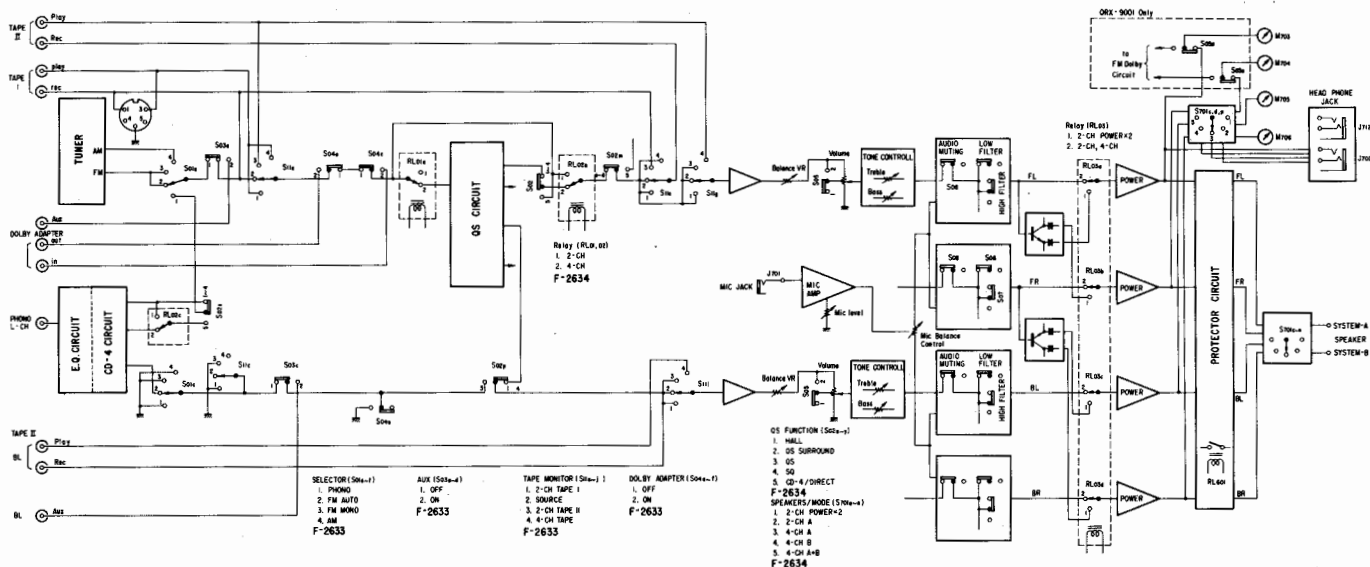
◦ Noise reduction circuit made under license from Dolby Laboratories Inc.

* Design and specifications subject to change without notice for improvements.

2. BLOCK DIAGRAM

2-1. QRX-8001

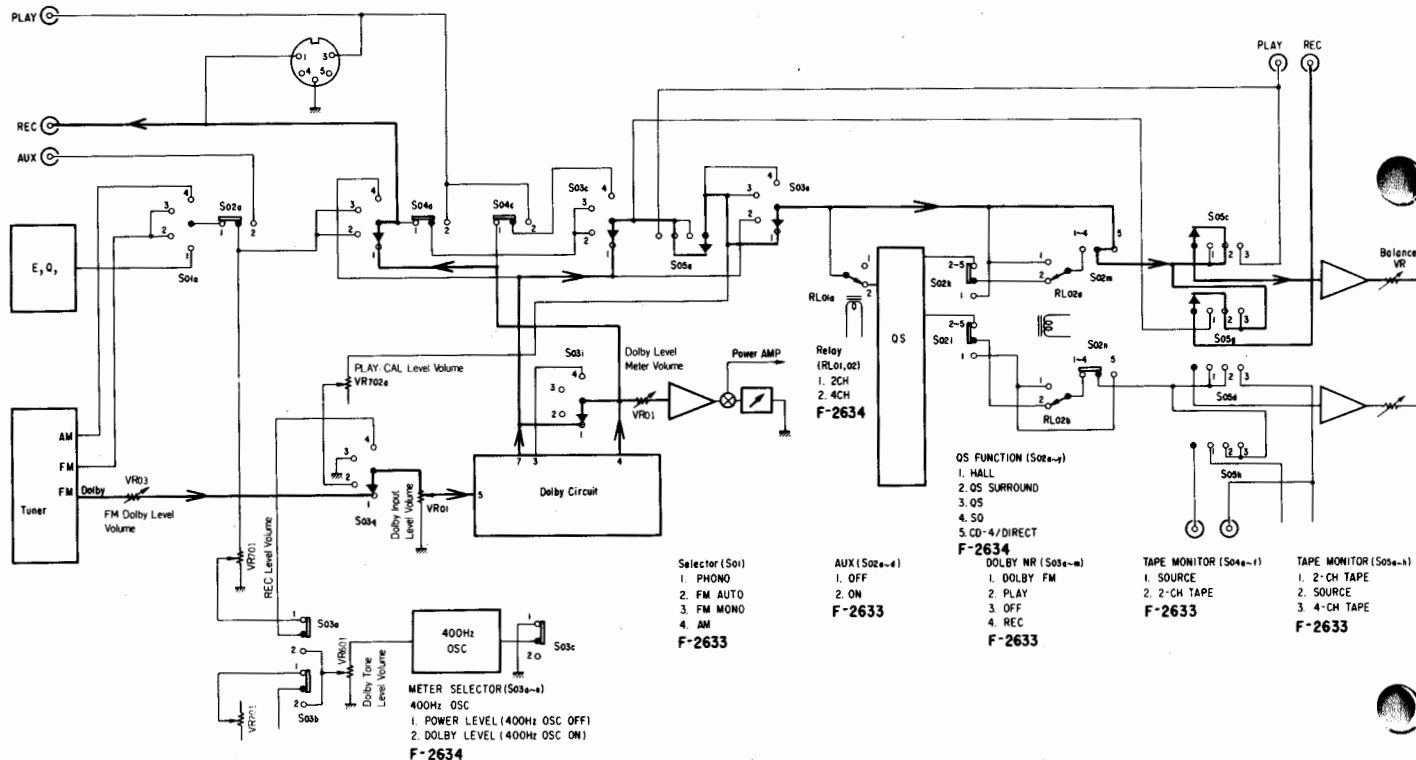
Note: This Block Diagram indicates only L-CH before Audio Muting.



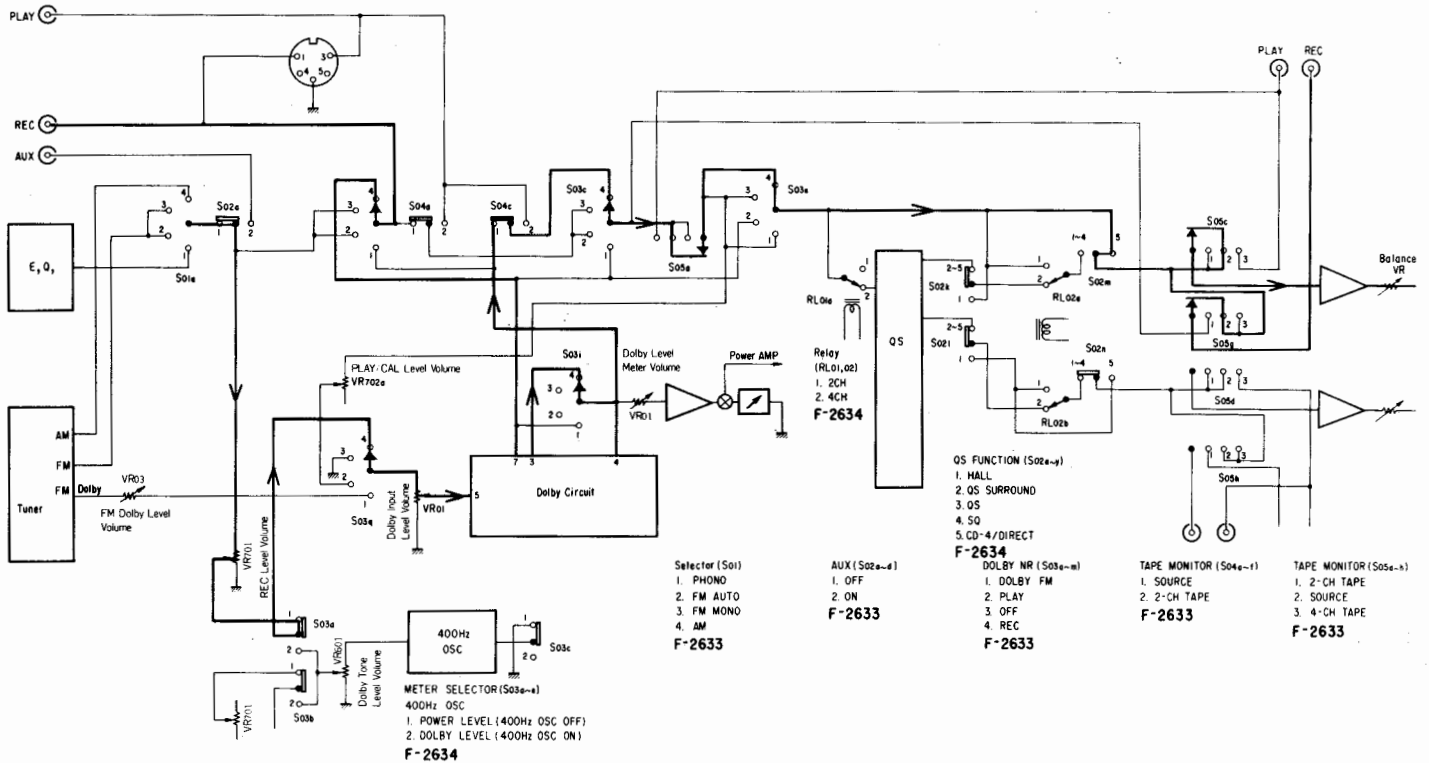
2-2. QRX-9001

Note: Follow Block Diagram QRX-8001 above after the Balance Volume.

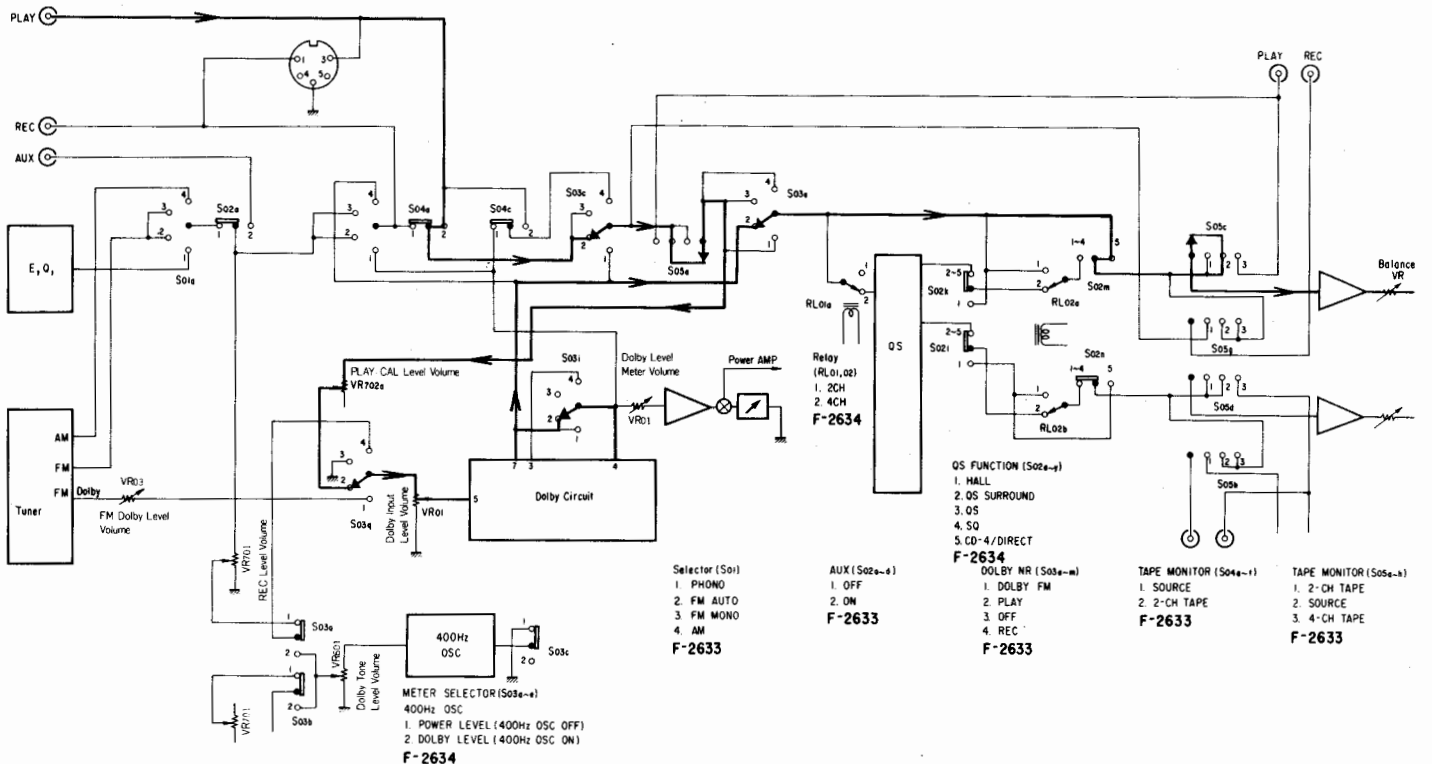
(a) Dolby Operation (FM Dolby Mode)



[b] Dolby Operation (Rec Mode)



[c] Dolby Operation (Play Mode)



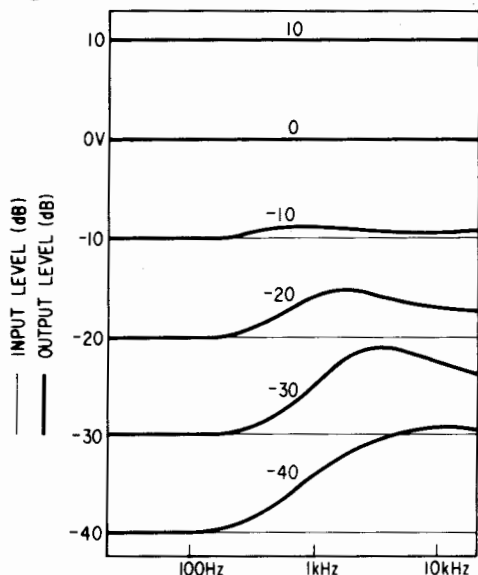
3. OPERATION OF FM DOLBY SYSTEM

This Dolby Noise Reduction System Type B used in this unit is not only available for encoding of the FM dolbyized signal but also useful for encoding and decoding of other signals. Therefore it is possible and effective to combine with other products such as a cassette deck without Dolby system.

FM Dolby System

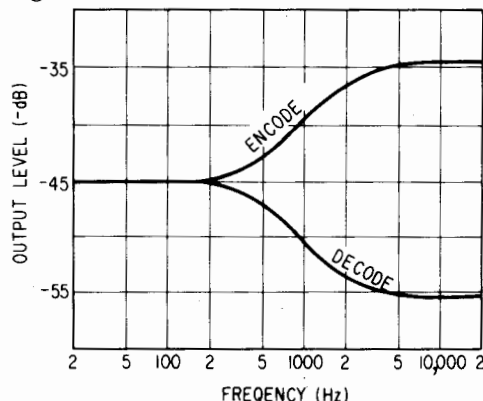
FM broadcasting system is originally able to produce a very high quality audio performance; however, FM stereophonic broadcasting system incurs a 20dB Signal-Noise ratio decrease. When Dolby B Type Noise Reduction system is used for a FM stereo, Signal-Noise ratio (S/N) is conspicuously improved and this ratio is at about 10dB.

Fig. 3-1



Whole range output Frequency Response characteristics against input level.

Fig. 3-2



Low level Frequency Response characteristics of encode and decode processors.

Principles

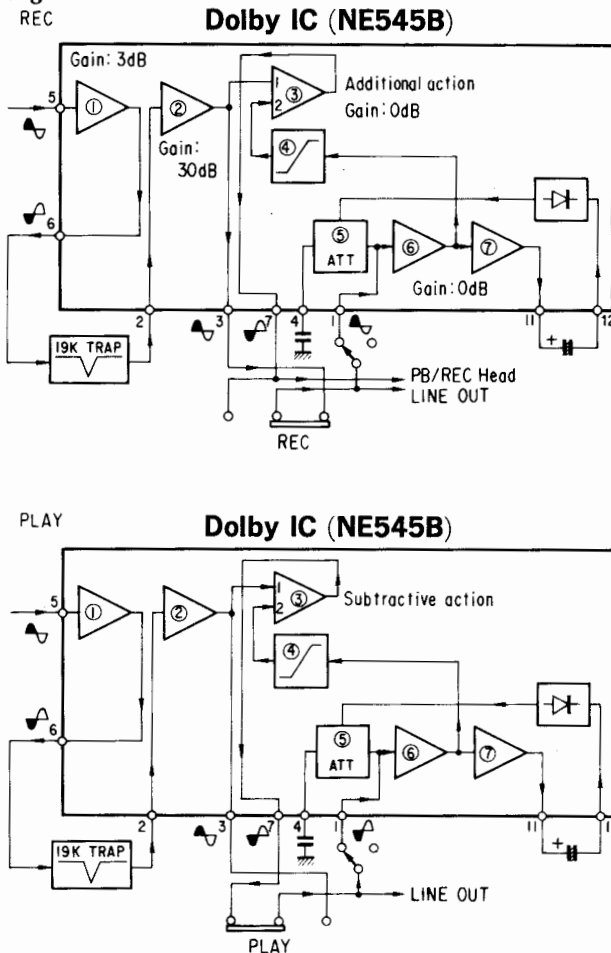
The S/N of the FM becomes worse when the frequency is high and the level is low. Because of this reason, the middle and high range of the low level signal is expanded by a FM station. Then the signal will be compressed proportionally along the expanded level by a receiving side. (See Fig. 1, 2)

This unit employs a IC NE545B for a main Dolby circuit. The Operating diagram is shown in the Fig. 3.

Complementary items

1. When FM Dolby system is being used, the de-emphasis of FM-out is 25 μ s.
2. The input level of FM Dolby is at 50% modulation and ± 37.5 kHz.
3. This unit has a own 400Hz Oscillator for Dolby Tone in order to adjust itself to the Dolby level.

Fig. 3-3



4. ADJUSTMENTS

Abbreviations

Equipment

AM FM Generator Oscilloscope Genescope
 AM Standard Signal Generator AM SSG
 FM Standard Signal Generator FM SSG
 FM Stereo Generator..... Stereo SG
 Oscilloscope Scope
 Audio Oscillator Audio Osc.
 Distortion Meter Dist. Meter

Others

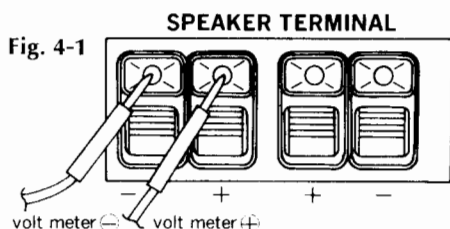
Clockwise CW.
 Counterclockwise CCW.
 Antenna ANT.
 Modulation MOD.

4-1. Audio Section

4-1-1. Driver Circuit Board Adjustment (See Figs. 4-1 & 4-2)

Note: 1. Master Volume Minimum
 2. Speaker Selector.....SYSTEM (A)
 3. Before adjustment, run the unit for more than 4 minutes, then check and readjust, if necessary.

STEP	SUBJECT	EQUIPMENT	MEASURE OUTPUT	ADJUST	ADJUST FOR	CONDITION
1	DC 0V Front L-CH	DC volt meter	Speaker terminal Front L-CH	F-2624 VR01	0V \pm 10mV	◦Step down meter's range accordingly ◦Change lead's polarity if meter swings backward
2	DC 0V Front R-CH	DC volt meter	Speaker terminal Front R-CH	F-2624 VR02	0V \pm 10mV	Same as above
3	DC 0V Back L-CH	DC volt meter	Speaker terminal Back L-CH	F-2624 VR01	0V \pm 10mV	Same as above
4	DC 0V Back R-CH	DC volt meter	Speaker terminal Back R-CH	F-2624 VR02	0V \pm 10mV	Same as above
5	Bias current Front L-CH	DC milliammeter	F-2638 F06	F-2624 VR03	30 \pm 3mA	Same as above
6	Bias current Front R-CH	DC milliammeter	F-2638 F07	F-2624 VR04	30 \pm 3mA	Same as above
7	Bias current Back L-CH	DC milliammeter	F-2638 F08	F-2624 VR03	30 \pm 3mA	Same as above
8	Bias current Back R-CH	DC milliammeter	F-2638 F09	F-2624 VR03	30 \pm 3mA	Same as above



Rear Side (Bottom View)

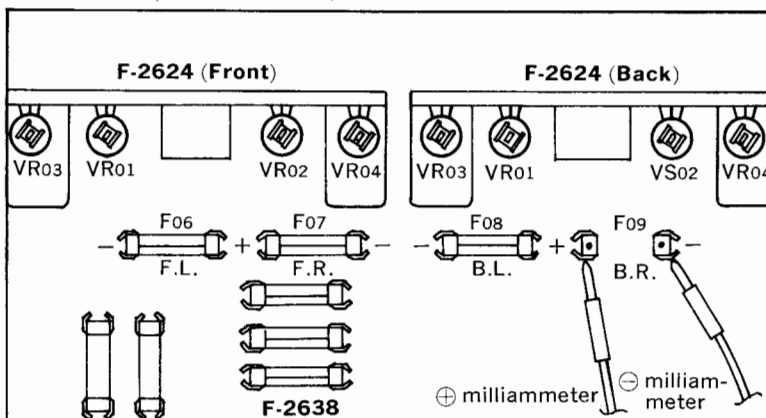


Fig. 4-2

4-1-2. Power Meter Adjustment (See Fig. 4-3)

- Note:**
1. InputAUX
 2. Input SignalSine Wave (1kHz)
 3. Speaker load.....8 Ω
 4. Master VolumeMaximum
 5. CD-4/4-CH DIRECT SwitchON

6. Dolby NR SwitchOFF
7. Speakers Switch4-CH A
8. For adjustment, run the unit for more than 4 minutes after the power is switched ON.

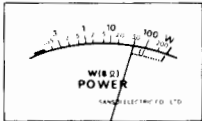
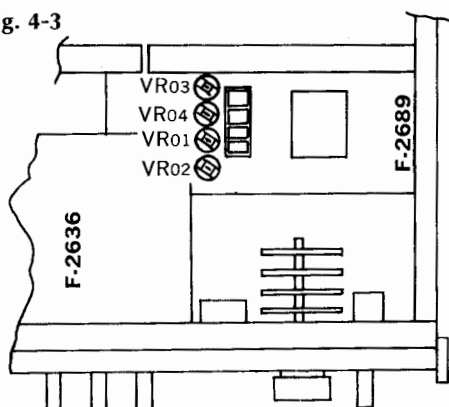
STEP	EQUIPMENT	MEASURE OUTPUT	OUTPUT LEVEL	ADJUST	ADJUST FOR
Front L-CH	AC Volt Meter	Speaker Terminal Front L-CH	20V (50W)	VR01 F-2689	Meter Position 50W 
Front R-CH	Same as above	Speaker Terminal Front R-CH	Same as above	VR02 F-2689	
Back L-CH	Same as above	Speaker Terminal Back L-CH	Same as above	VR03 F-2689	
Back R-CH	Same as above	Speaker Terminal Back R-CH	Same as above	VR04 F-2689	

Fig. 4-3



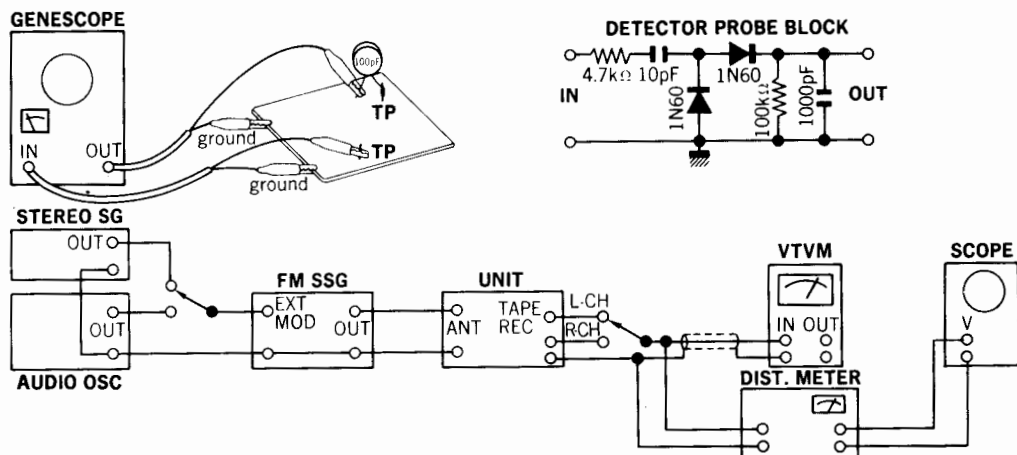
Front Side (Bottom View)

4-2. Tuner Section

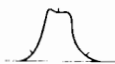
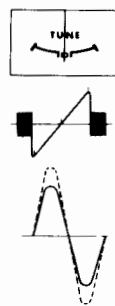



4-2-1. FM & MPX Adjustment & Alignment

- Note:**
1. Selector.....FM AUTO
 2. FM Muting Switch.....OFF

3. Connection.....Connect the output of genescope to TP through 100pF ceramic capacitor.

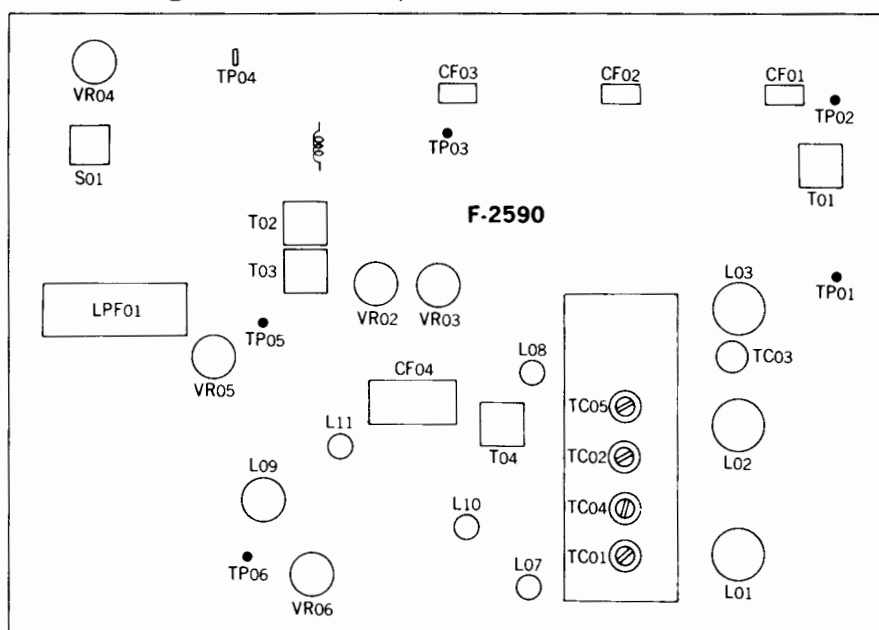


<QRX-8001> A) FM IF Adjustment & Tracking (See Fig. 4-4)


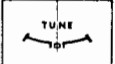


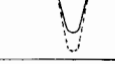
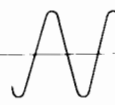
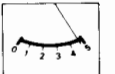
STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR	CONDITION
		FROM	TO				
1.	IF Coil	Output 60dB Genescope	TP01 F-2590	TP03 F-2590 Use Detector Probe	T01 F-2590	Max. IF waveform	
2.	Discriminator Coil	Output 50dB Genescope	Same as above	TP04 F-2590	T02 T03 F-2590	Center indication on tune meter Max. linearity of S curve Steep linearity of S curve Set output wave to dip point (It's minimum distortion)	
3.	90MHz Dial Calibration	90MHz ANT Input 60dB 400Hz (100% MOD) FM SSG	ANT terminal 300Ω	REC OUT L or R-CH VTVM & Scope	L03 F-2590	Max. Output	
	106MHz Dial Calibration	106MHz ANT Input 60dB 400Hz (100% MOD) FM SSG	Same as above	Same as above	TC03 F-2590	Same as above	
4.	90MHz RF Adj.	90MHz ANT Input 60dB 400Hz (100% MOD) FM SSG	Same as above	Same as above	L01, L02 F-2590	Same as above	
	106MHz RF Adj.	106MHz ANT Input 60dB 400Hz (100% MOD) FM SSG	Same as above	Same as above	TC01 TC02 F-2590	Same as above	
5.	Signal Meter Volume	98MHz ANT Input 60dB 400Hz (100% MOD) FM SSG	Same as above	Signal Meter	VR02 F-2590	4.3 on Meter	

◇Adjusting or Connecting Points on AM, FM & FM MPX circuit board F-2590

Fig. 4-4

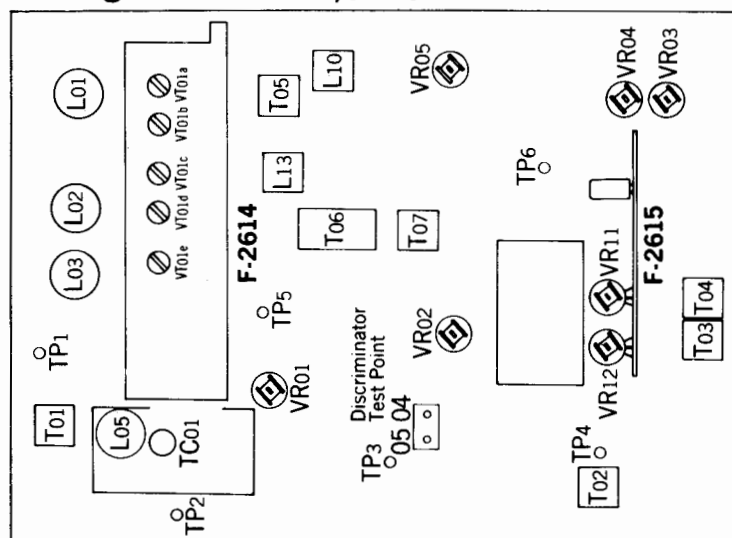


〈QRX-9001〉 B) FM IF Adjustment & Tracking (See Fig. 4-5)

STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR	CONDITION
		FROM	TO				
1.	IF Coil	Output 60dB Genescope	TP01 F-2614	TP03 F-2614 Use Detector Probe	T01 F-2614	Max. IF waveform	
		Output 50dB Genescope	Same as above	TP04 F-2614 Use Detector Probe	T02 F-2614		
2.	Discriminator Coil	Output 50dB Genescope	Same as above	TM04 F-2614	T03	Center indication on tune meter	   
					T04 F-2614	Max. linearity of S curve Steep linearity of S curve Set output wave to dip point (It's minimum distortion)	
3.	90MHz Dial Calibration	90MHz ANT Input 60dB 400Hz (100% MOD) FM SSG	ANT terminal 300Ω	REC OUT L or R-CH VTVM & Scope	L05 F-2614	Max. Output	
	106MHz Dial Calibration	106MHz ANT Input 60dB 400Hz (100% MOD) FM SSG	Same as above	Same as above	TC01 F-2614	Same as above	
4.	90MHz RF Adj.	90MHz ANT Input 60dB 400Hz (100% MOD) FM SSG	Same as above	Same as above	L01, L02, L03 F-2614	Same as above	
	106MHz RF Adj.	106MHz ANT Input 60dB 400Hz (100% MOD) FM SSG	Same as above	Same as above	VT01a VT01c VT01e F-2614	Same as above	
5.	Signal Meter Volume	98MHz ANT Input 100dB 400Hz (100% MOD) FM SSG	Same as above	Signal Meter	VR11 F-2615	4.7 on Meter	

◆Adjusting or Connecting Points on AM, FM & FM MPX circuit board F-2614

Fig. 4-5



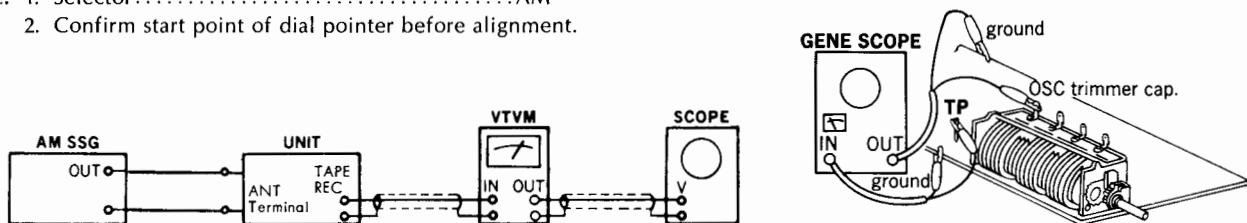
4-2-2. MPX Adjustment (See Fig. 4-4 & 4-5)

STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR	CONDITION
		FROM	TO				
1.	PLL VCO Adj.	98MHz ANT Input 60dB FM SSG Pilot 19kHz (10% MOD) L-CH 1kHz (45% MOD) R-CH (0% MOD) STEREO SG	ANT terminal 300Ω	Stereo indicator	(A)VR05 F-2590 (B)VR01 F-2614	Light indicator	Adjust the VR within center of lighting level.
	PLL VCO Adj. In case of using Freq. counter.		Make short between TP04 & chassis	TP05 (A)F-2590 (B)F-2614 Use Freq. counter	VR05 (A)F-2590 (B)F-2614	76kHz ±200Hz	For this adjustment, run the unit over 30 seconds.
2.	Separation	98MHz ANT Input 60dB FM SSG Pilot 19kHz (10% MOD) L-CH (0% MOD) R-CH 1kHz (45% MOD) STEREO SG	ANT terminal 300Ω	REC OUT L-CH VTVM & Scope	(A)VR04 F-2590 (B)VR02 F-2614	Min. Output -35dB	Confirm separation L-CH→R-CH -35dB
3.	Muting level & indicator level	98MHz ANT Input (A)18dB (B)23dB FM SSG Pilot 19kHz (10% MOD) L-CH 1kHz (45% MOD) R-CH (0% MOD) STEREO SG	Same as above	Stereo indicator	(A)VR03 F-2590 (B)VR12 F-2614	Muting level (A)18dB (B)23dB Indicator lighting level (A)18dB (B)23dB	

* In the procedure above, (A) is indicating QRX-8001 and (B) is QRX-9001.



4-2-3. AM IF Adjustment & Tracking (See Fig. 4-4 & 4-5)

- Note: 1. Selector.....AM
2. Confirm start point of dial pointer before alignment.



STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR	CONDITION
		FROM	TO				
1.	IF Coil	Genescope Output 65dB	(A)TC04 F-2590 (B)VT01b F-2614	TP06 (A)F-2590 (B)F-2614	(A)CF04 F-2590 (B)T06 F-2614	Max. IF waveform	
2.	600kHz Dial Calibration	600kHz ANT Input 60dB 400Hz (MOD 30%) AM SSG	AM ANT terminal	REC OUT L or R-CH VTVM & Scope	(A)T04 F-2590 (B)L13 F-2614	Max. Output	
	1400kHz Dial Calibration	1400kHz ANT Input 60dB 400Hz (MOD 30%) AM SSG	Same as above	Same as above	TC05 (A)F-2590 (B)F-2614	Same as above	

to be continued

STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR	CONDITION
		FROM	TO				
3.	600kHz RF Adj.	600kHz ANT Input 60dB 400Hz (MOD 30%) AM SSG	AM ANT Terminal	REC OUT L or R-CH VTVM & scope	L702 Bar Antenna	Same as above	
	1400kHz RF Adj.	1400kHz ANT Input 60dB 400Hz (MOD 30%) AM SSG	Same as above	Same as above	(A)TC04 F-2590 (B)VT01b F-2614	Same as above	
4.	Signal Meter volume	1000kHz ANT Input 76dB 400Hz (MOD 30%) AM SSG	Same as above	Signal Meter	(A)VR06 F-2590 (B)VR05 F-2614	(A)4.3 on meter (B)4 on meter	

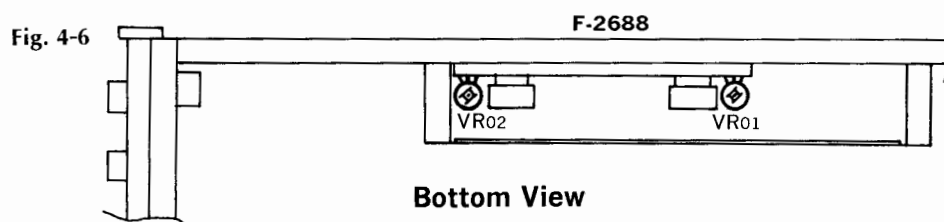
* In the procedure above, (A) is indicating QRX-8001 and (B) is QRX-9001.

4-3. Dolby Circuit Adjustment (QRX-9001 Only) (See Fig. 4-6)

4-3-1. Input Level Adjustment of Dolby IC (NE545B)

Note: 1. Speaker Selector2-CH A
2. Master VolumeMinimam
3. Balance VolumeCenter
4. Accessory SwitchOFF
5. REC Level VolumeMAX
6. Dolby Selector SwitchREC

STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR
		FROM	TO			
1.	L-CH	400Hz 85mV Audio OSC.	AUX Terminal	REC Terminal TAPE 1 VTVM	VR01 F-2688	Output 270mV
2.	R-CH	Same as above	AUX Terminal	REC Terminal TAPE 1 VTVM	VR02 F-2688	Same as above



4-3-2. Calibration Tone Volume & Dolby Meter Volume Adjustment

Note: 1. Speaker Selector2-CH A
2. Master VolumeMinimam
3. Balance VolumeCenter
4. Accessory SwitchOFF
5. Dolby Selector SwitchREC

(1) Calibration Tone Volume Adjustment (See Fig. 4-7 on Page 12)

1. Turn on the Dolby REC CAL. TONE switch.
2. Connect VTVM to the front TAPE 1 REC terminal.
3. Adjust VR601 on the circuit board, F-2634 to obtain 270mV on indication of VTVM.

(2) Dolby Meter Volume Adjustment (See Fig. 4-8, 4-9)

Adjust VR01 (L-CH) and VR02 (R-CH) on the circuit board, F-2633 so that indicator of power meter will be center of Dolby mark.

Fig. 4-7

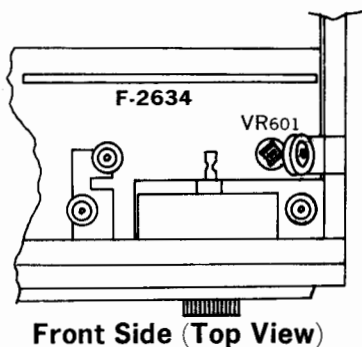


Fig. 4-9

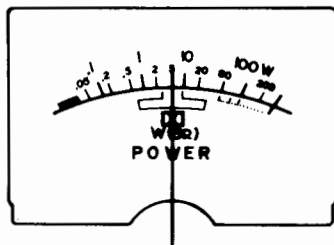
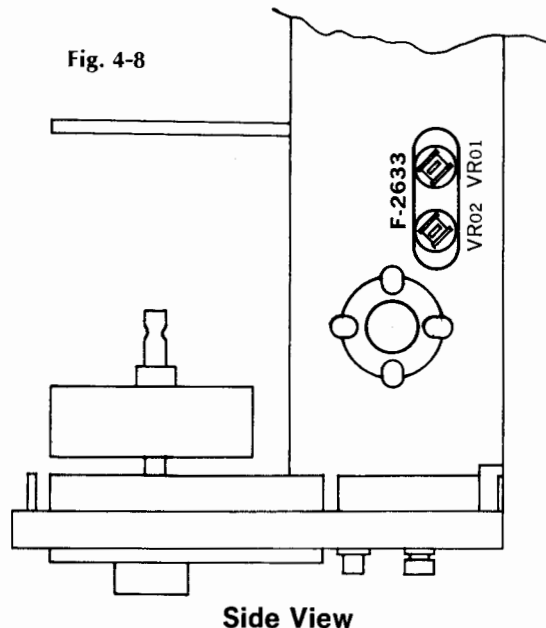


Fig. 4-8

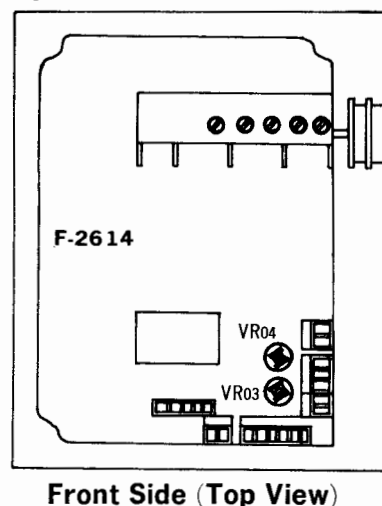


4-3-3. FM Dolby Volume Adjustment (See Fig. 4-10)

- Note: 1. Selector.....FM
 2. Dolby SelectorDolby FM
 3. REC CAL. TONE Switch.....OFF
 4. Master VolumeMin.

SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR
	FROM	TO			
L-CH	98MHz ANT Input 60dB FM SSG Pilot 19kHz (10% MOD) L-CH 1kHz (25% MOD) R-CH (0% MOD)	FM ANT Terminal 300Ω	REC Terminal TAPE 1 L-CH VTVM	VR03 F-2614	Output Level 270mV
R-CH	98MHz ANT Input 60dB FM SSG Pilot 19kHz (10% MOD) R-CH 1kHz (25% MOD) L-CH (0% MOD)	Same as above	REC Terminal TAPE 1 R-CH VTVM	VR04 F-2614	Same as above

Fig. 4-10

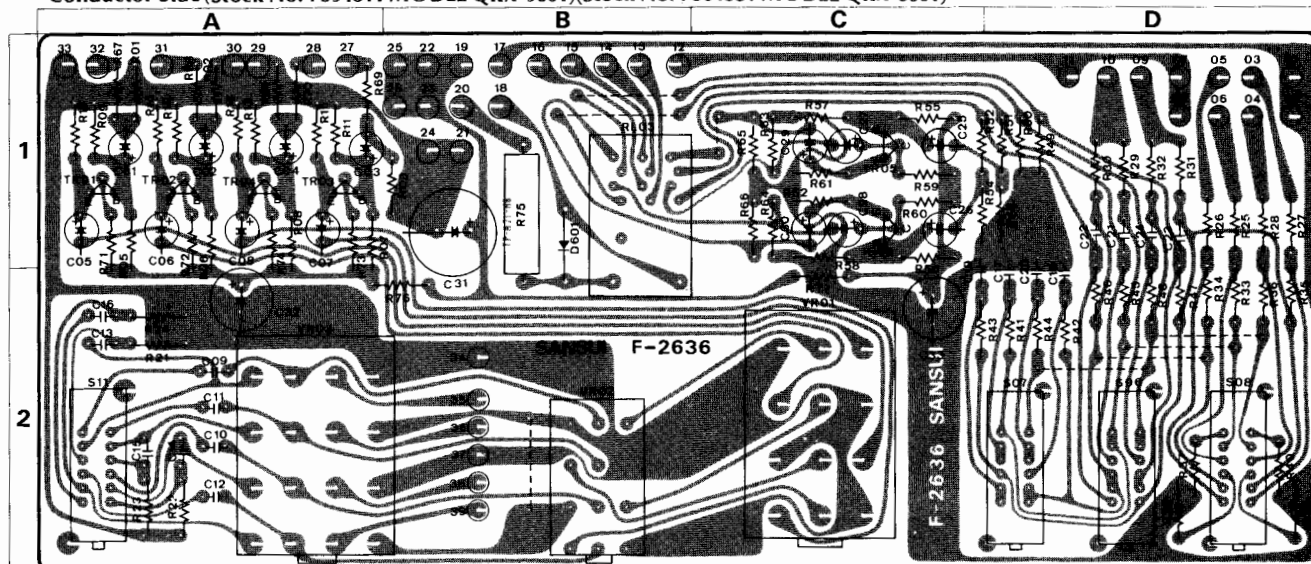


5. PARTS LOCATION & PARTS LISTS

5-1. F-2636 Volume & Filter Circuit Board

Conductor Side (Stock No. 7594311 MODEL QRX-9001) (Stock No. 7564381 MODEL QRX-8001)

Since some of capacitors and resistors are omitted from parts lists in this Service Manual, refer to the common parts list for capacitors & resistors which was appended previously to each Sansui Manual.



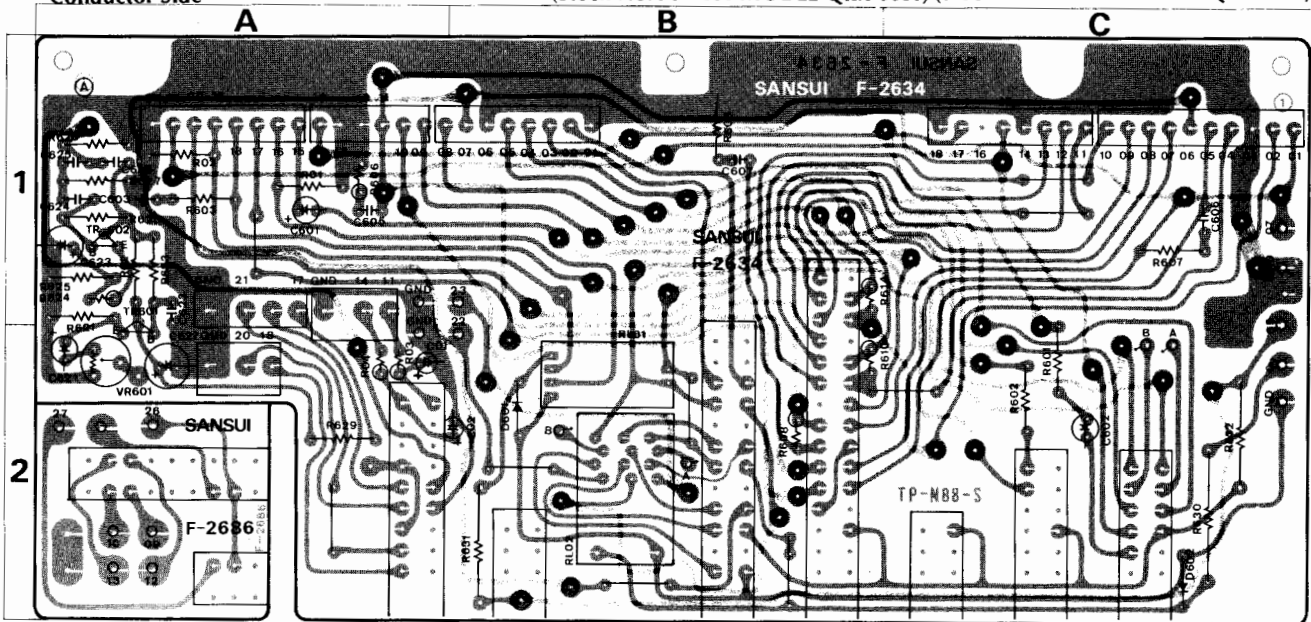
Parts List

Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position		
TR01-04	0306070	2SC1313 (F, G)	Transistor	VR01	1060380, 1	250kΩ × 4 (M, N)	2 C	S03-04	1170880	SLS14251 A	Lever Switch		
TR05, 06	0306070, 1	2SC1313 (F, G)		VR02	1065030, 1	250kΩ × 4 (M, N)	2 B	MODEL QRX-9001 Only					
D601	0310340	10D1 Diode		1, 2 B	VR03	1060450, 1	250kΩ × 4 (B)	2 A	S05	1170880	Lever Switch	2 D	
MODEL QRX-8001 Only													
C09-12	0620161	160pF 50V P.C.		S01	1170880	SLS14251 A	Lever Switch	S06, 07	1170880				
R75	0182561	560Ω 2W Ce.R.	1, 2 B	S02	1170870	SLS14201 A			S08	1170870			
RL01	1150380	MH4P-0 Relay											

5-2. F-2634 4-ch Function Switch & REC CAL Tone Circuit Board

Conductor Side

(Stock No. 7650501 MODEL QRX-9001) (Stock No. 7650551 MODEL QRX-8001)



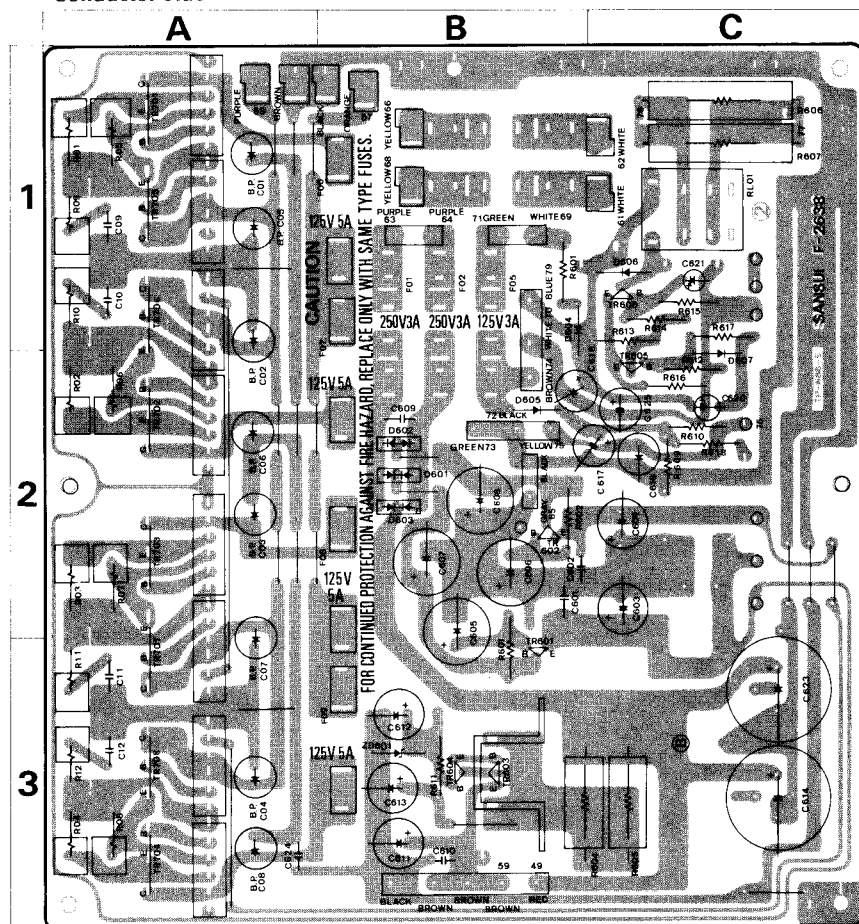
Parts List

Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position
D601	0310340	10D-1 Diode	2 B	S02	1131350	Push Switch, AUDIO MUTING		MODEL QRX-9001 Only			
ZD901	0315970	EQ801-13R Zener Diode		2410590	4P Pin Ass'y (Type D)			TR601	0306131, 2	2SC1364 (6, 7)	Transistor
R630	0182821	820Ω 2W Ce.R.	2 C	2410730	6P Pin Ass'y (Type A)			TR602	0306131, 2	2SC1364 (6, 7)	
RL01	1150320	HA-224N Relay	2 B	2410740	8P Pin Ass'y (Type A)			D602	0310340	10D-1 Diode	2 C
RL02	1150380	MH4P-0 Relay	2 B	2410750	10P Pin Ass'y (Type A)			VR601	1035190	100kΩ (B)	2 A
				MODEL QRX-8001 Only				S03	1131340	Push Switch, LOW FILTER	
				S09	1131340	Push Switch		2410920	3P Pin Ass'y (Type E)		

5-3. F-2638 Power Supply Circuit Board

(Stock No. 7502031 MODEL QRX-9001)
(Stock No. 7502051 MODEL QRX-8001)

Conductor Side



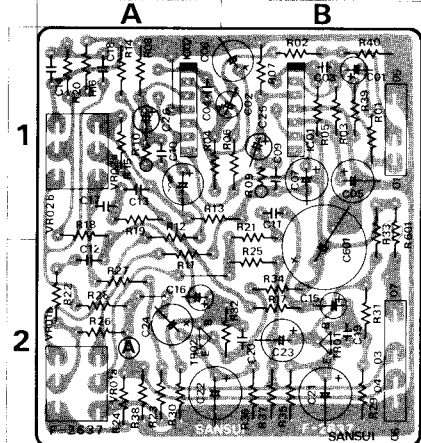
Parts List

Parts No.	Stock No.	Description	Position
TR601	0308451 or 0308452 0303360	2SD356 (D) or 2SD356 (E) 2SB560 (D)	3 B
TR602	0303361 or 0308391.2 0305930.1	2SB560 (E) or 2SD313 (D, E) 2SC1211 (C, D)	2 B 3 B 3 B
D601	0310680	10DC-1 (Black)	2 B
D602	0310670	10DC-1R (RED)	2 B
D603	0310680	10DC-1 (Black)	2 B
D604	0310340	10D-1 (1S2226)	1. 2 B
ZD601	0315970 or 0316310	EGA01-13R or RD-13E (B)	3 B
C601	0655103	10000pF	2 B
C602	0655103	10000pF	2 B
C609	0655103	10000pF	2 B
C614	0549207	1000pF	3 C
C623	0549207	1000pF	3 C
R01-04	0153338	0.33Ω	1. 2. 3 A
R05-08	0153338	0.33Ω	1. 2. 3 A
R09-12	0156479	4.7Ω	1. 3 A
R604	0183471	470Ω	3 B. C
R605	0183471	470Ω	3 C
F01.02	0432260	3A. 250V	1 B
F03.04	0434060	10A. 250V	1 B
F05	0432260	3A. 250V	1 B
F06-09	0432290	5A. 125V	1 B. 3 B
	2310220	Fuse Holder (large)	
	2310230	Fuse Holder (Small)	
	5936990	Heat Sink	
	2410730	6P Pin Assy Type A	
MODEL QRX-8001 Only			
R608	0192479	4.7Ω 1/2 W F.R.	
F03.04	0434060	10A. 250V AC Fuse	
MODEL QRX-9001 Only			
TR605	0306131.2	2SC1364 (6.7)	2 C
TR606	0306131.2	2SC1364 (6.7)	1 C
D605	0310340	10D-1	2 B
D606	0310340	10D-1	1 C
D607	0310340	10D-1	2 C
R606, 607	0137399	3.9Ω 7 W Ce.R.	1 C
R608	0192479	4.7Ω 1/2 W F.R.	
RL601	1150360	Relay	

5-4. F-2637 Tone Control Circuit Board

(Stock No. 7561561 MODEL QRX-9001)
(Stock No. 7561571 MODEL QRX-8001)

Conductor Side



Parts List

Parts No.	Stock No.	Description	Position
TR01.02	0306070.1	2SC1313 (F, G)	2 B. 2 A
IC01.02	0360190	BA312 I.C.	1 B. 1 A
VR01	1015200.1	100kΩ (B)	2 A
VR02	1015200.1	100kΩ (B)	1 A
	2410670	3P Pin Assy (Type F)	
	2410680	4P Pin Assy (Type F)	

NOTE: A part of the words printed on the circuit board, F-2638, is different from the Fig above and the schematic diagram because of productive term difference. In case of above, please refer to the Fig above and the schematic diagram.

(Different point)

The words TR702, TR704, TR706 and TR708 are misprinted as follows.

TR702→TR708 TR704→TR706 TR706→TR704 TR708→TR702

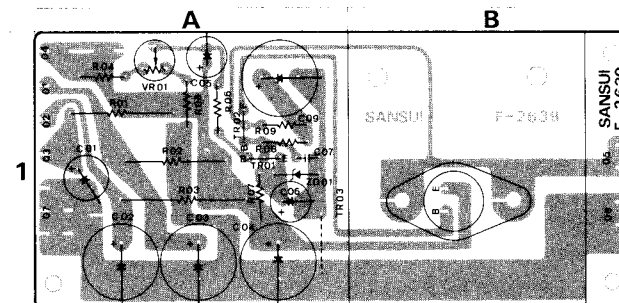
(Applicable model)

The left-most digit of serial NO. 23609, 23610 and 23611.

5-5. F-2639 Pre-Power Supply Circuit Board

(Stock No. 7502041 MODEL QRX-9001) (Stock No. 7502061 MODEL QRX-8001)

Conductor Side



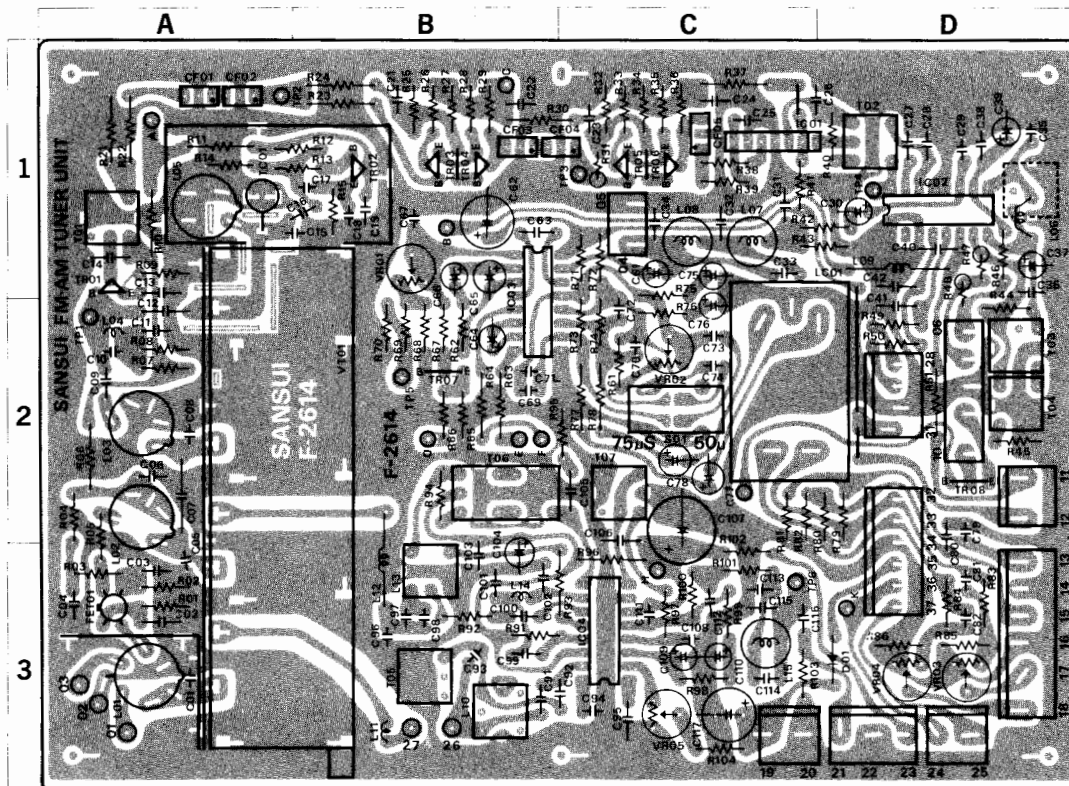
Parts List

Parts No.	Stock No.	Description	Position
TR01	0306070.1	2SC1313 (F, G)	1 A
TR02	0305930.1	2SC1211 (C, D)	1 A
TR03	0306100.1 or 0308551.2	2SC1444 (R, O) or 2SD315V10(D, E)	1 A
ZD01	0315760 or 0316390	EGA01-06R or RD6.2E	1 A

Parts No.	Stock No.	Description	Position
R02	0133181	180Ω	1 A
R03	0133181	180Ω	1 A
VR01	1035350	4.7kΩ(B) Semi-Variable Resistor	1 A
	5937420	Heat Sink	
MODEL QRX-8001 Only			
R01	0182331	330Ω 2 W Ce.R.	1 A

5-6. F-2614 Tuner Circuit Board (Stock No. 7521361 MODEL QRX-9001 Only)

Conductor Side



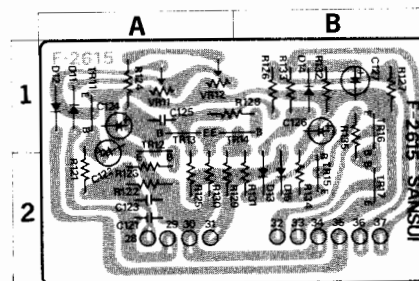
Parts List

Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position
TR01	0305801, 2	2SC1047 (B, C)	1 A	L02	4210340	3-307395 RF Coil	2 A
TR02	0305801, 2	2SC1047 (B, C)	1 B	L03	4210340	3-307395 RF Coil	2 A
TR03	0306341	2SC1674 (L)	1 B	L04	4900140	L-140 1/2F Inductor	2 A
	or	or		L05	4220400	3-304672 Osc Coil	1 A
	0306342	2SC1674 (K)		L06	4290300	18mH Inductor	1 D
	0306341	2SC1674 (L)		L07	4900250	8.2/2H Inductor	1 C
TR04	or	or	1 B	L08	4900240	6.8/2H Inductor	1 C
	0306342	2SC1674 (K)		L09	4290011	Peaking Coil	1 D
	0306341	2SC1674 (L)		L11	4900100	L-0105 3.3/2H Inductor	3 B
TR05	or	or	1 C	L12	4290011	Peaking Coil	2, 3 B
	0306342	2SC1674 (K)		L13	4220650	138/2H Osc Coil	3 B
	0306341	2SC1674 (L)		L14	4900110	100/2H Inductor	3 B
TR06	or	or	1 C	L601	4900100	3.3/2H Inductor	
	0306342	2SC1674 (K)		T01	4235930	10.7MHz IF Coil	1 A
	0305731, 2	2SC711 (E, F)		T02	4235930	10.7MHz IC Coil	1 D
TR07	or	or	2 B		4235990	10.7MHz FM IF	
	0305951, 2	2SC945 (Q, P)		T03	or	or	2 D
IC01	0360120	μPC555H	1 C		4235991	10.7MHz FM IF Coil	
IC02	0360350	HA1137	1 D		4236000	10.7MHz FM IF Coil	
IC03	0360320	HA1196	1, 2 B	T04	or	or	2 D
IC04	0360390	HA1197	3 C		4236001	10.7MHz FM IF Coil	
FT01	0370121, 2	3SK41 (L, M) FET	3 A	T06	0910280	455kHz Ceramic Filter	2 B
	0311160	1S2473D		T07	4230620	455kHz IF Coil	2 C
D02	or	or		CF01	0910150	10.7MHz	1 A
	0311180	1S1588		CF02	0910150	10.7MHz	1 A
	0311160	1S2473D		CF03	0910150	10.7MHz	1 B
D903	or	or		CF04	0910150	10.7MHz	1 B, C
	0311180	1S1588		CF05	0910150	10.7MHz	1 C
C01	0669325	15pF	3 A	LC01	0910360	BL-12AK Low Pass Filter	2 C, D
C05	0669325	15pF	3 A	VR01	1034250	4.7kΩ (B)	1 B
C08	0669325	15pF	50V C.C.	VR02	1035190	100kΩ (B)	2 C
C09	0661100	10pF		VR03	1035130	10kΩ (B)	3 D
C12	0679008	1.0pF	500V Gimmick	VR04	1035130	10kΩ (B)	3 D
			Capacitor	VR05	1035110	4.7kΩ (B)	3 C
C15	0669330	20pF	1 A, B	S01	1110270	Slide Switch	2 C
C16	0669295	10pF	1 A, B	VT01	1220260	AM-FM Variable Capacitor	2, 3 A, B
C17	0669295	10pF	1 B	TC01	1230090	Trimmer Capacitor	1 A
C18	0669295	10pF	50V C.C.		2260010	Test Pin	
C19	0661330	33pF			2260020	Test Pin	
C35	0669204	3.3pF	1 D		2410570	5P Pin Ass'y (Type F)	
C67	0629005	360pF	1 B		2410650	2P Pin Ass'y (Type F)	
C73	0620561	560pF	50V P.C.		2410850	4P Pin Ass'y (Type B)	
C74	0620561	560pF	2 C		2410860	6P Pin Ass'y (Type B)	
C96	0669400	15pF	3 B		2410910	2P Pin Ass'y (Type E)	
C97	0669400	15pF	50V C.C.		2410920	3P Pin Ass'y (Type E)	
C98	0620361	360pF	50V P.C.		2410950	6P Pin Ass'y (Type E)	
R63	0210471	470Ω 1/2W N.I.R.	2 B		2510040	Front End Pack	
L01	4200720	3-307393 Antenna Coil	3 A				

5-7. F-2615 Tuner Sub Circuit Board

(Stock No. 7521371 MODEL QRX-9001 Only)

Conductor Side

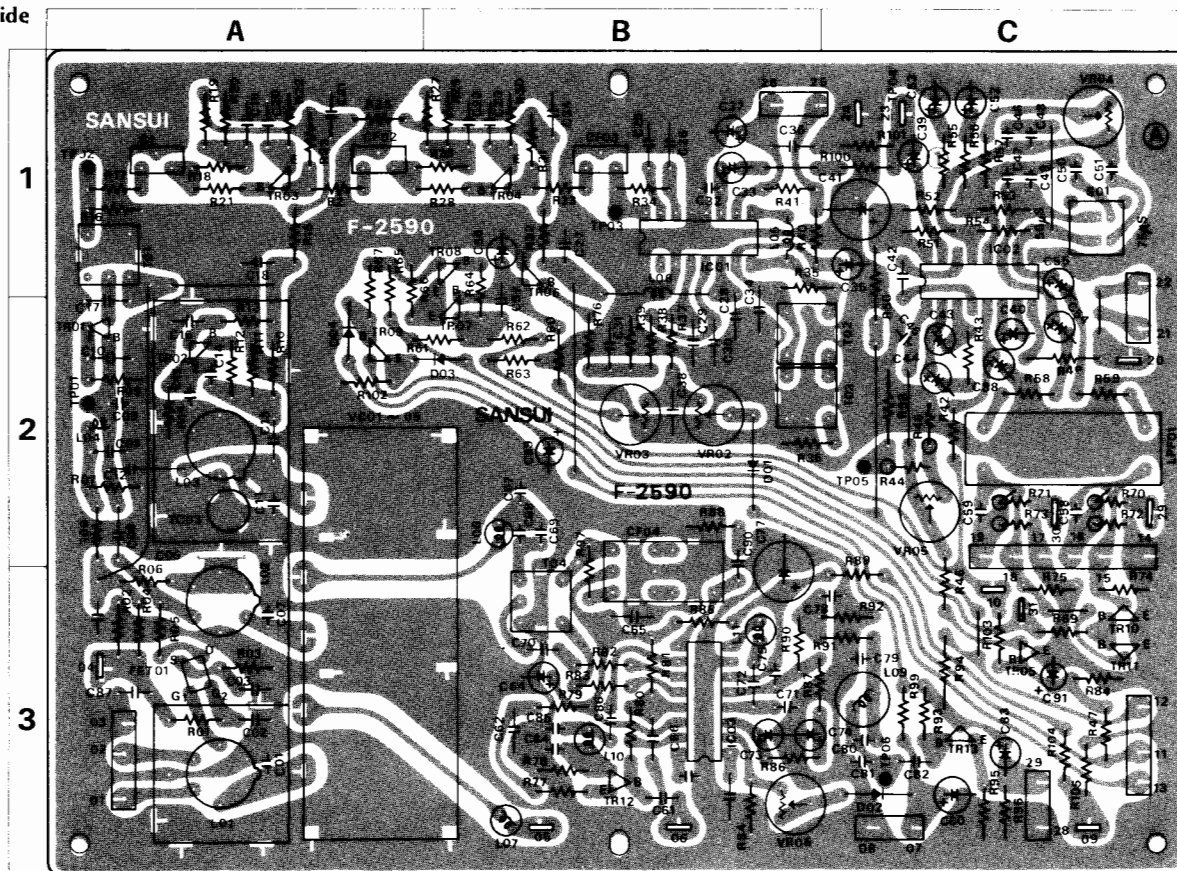


Parts List

Parts No.	Stock No.	Description	Position
TR11	0306390, 1	2SC1636(1, 2) or	1 A
	0305370, 1	2SC733 (Q, Y)	
TR12	0305731, 2	2SC711 (E, F) or	1, 2 A
	0305951, 2	2SC945 (Q, P)	
TR13	0305731, 2	2SC711 (E, F) or	1 A
	0305951, 2	2SC945 (Q, P)	
TR14	0305731, 2	2SC711 (E, F) or	1 A, B
	0305951, 2	2SC945 (Q, P)	
TR15	0300510, 1	2SA733 (P, Q)	2 B
TR16, 17	0306390	2SC1636 (1)	1 B, 2 B
	0305370, 1	2SC733 (Q, Y)	
D11	0311160	1S2473D or	1 A
	0311180	1S1588	
D12	0311160	1S2473D or	1 A
	0311180	1S1588	
D13	0311160	1S2473D or	2 B
	0311180	1S1588	
D14	0311160	1S2473D or	1 B
	0311180	1S1588	
D15	0311160	1S2473D or	2 B
	0311180	1S1588	
D901	0311160	1S2473D or	
	0311180	1S1588	
VR11	1035410	47kΩ (B)	1 A
VR12	1035430	100kΩ (B)	1 A
	2420510	4P Connector (Type A)	
	2420520	6P Connector (Type A)	

5-8. F-2590 Tuner Circuit Board (Stock No. 7521381 MODEL QRX-8001 Only)

Conductor Side



Parts List

Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position	
TR01	0305801	2SC1047 (B)	2 A	D905	0311160	1S2473D	Diode	L07	4900100	3.3 μ H	3 B	
TR02	0305801	2SC1047 (B)			2 A	0311180		1S2473D	L08	4900100	3.3 μ H	2 B
TR03	0306113	2SC738 (D)			1 A	0311160		1S2473D	L09	4900220	100mH	3 C
TR04	0306112	2SC738 (C)			1 B	0311180		1S1588	L10	4900110	100 μ H	3 B
TR05	0305731, 2	2SC711 (E, F)	3 C	C01	0669350	15pF	3 A	L11	4900110	100 μ H	3 B	
TR06	0305731	2SC711 (E)	1 B	C05	0659015	2200pF	2 A	T01	4235930	10.7MHz IF Coil	1 A	
	or	2SC711 (F)		C06	0669005	8.2pF	2 A	T02	4235990	10.7MHz	2 B, C	
	0305732	2SC711 (F)		C07	0669350	15pF	3 A		or	10.7MHz		
TR07	0305731	2SC711 (E)	2 B	C09	0661220	22pF	2 A		4235991	10.7MHz		FM IF Coil
	or	2SC711 (F)		C11	0669355	20pF	2 A	T03	4236000	10.7MHz	2 B, C	
	0305731	2SC711 (E)		C12	0679012	1.5pF	500V Gimmick Capacitor	2 A	or	10.7MHz		
TR08	or	2SC711 (F)	1 B	C13	0661100	10pF	2 A	T04	4220650	138 μ H Osc Coil	3 B	
	0305732	2SC711 (F)		C14	0661100	10pF	50V C.C.	2 A	CF01	0910150	10.7MHz	1 A
TR09	0300470	2SA726 (F)	2 A	C15	0661100	10pF	2 A	CF02	0910150	10.7MHz	1 A	
TR10	0306390	2SC1636-1	3 C	C45	0629005	360pF	2 C	CF03	0910150	10.7MHz	1 B	
TR11	0306390	2SC1636-1	3 C	C48	0620101	100pF	1 C	CF04	0910280	455kHz	2, 3 B	
TR12	0300283	2SA628 (F)	3 B	C49	0620101	100pF	50V P.C.	1 C	LF01	0910220	19kHz Low Pass Filter	
TR13	0305731, 2	2SC711 (E, F)	3 C	C50	0620561	560pF	1 C	VR02	1035170	47k Ω (B)	2 B	
IC01	0360350	HA1137	1 B	C51	0620561	560pF	1 C	VR03	1035190	100k Ω (B)	2 B	
IC02	0360320	HA1196	1 C	C67	0669400	15pF	50V C.C.	2 B	VR04	1035210	220k Ω (B)	Semi-Variable 1 C
IC03	0360150	HA1151	3 B	C68	0661150	15pF	2 B	VR05	1034250	4.7k Ω (B)	Resistor 2 C	
FT01	0370131	3SK41 (L)	FET	C69	0620361	360pF	50V P.C.	2 B	VR06	1035110	4.7k Ω (B)	
	or	3SK41 (K)		C84	0661150	15pF	50V C.C.		S01	1110270	Slide Switch	
	0370132	3SK41 (K)		C85	0661150	15pF	50V C.C.		VC01	1220250	AM-FM Variable Capacitor	2 A
D01	0340120	VD1212 Varistor	2 B	L01	4200720	Antenna Coil	3 A	TC03	1230090	Trimmer Capacitor		
D02	0310330, 1	1N60	3 C	L02	4210340	RF Coil	3 A		2410600	6P Pin Ass'y (Type D)		
D03	0311160	1S2473D	2 B	L03	4220400	Osc. Coil	2 A		2410910	2P Pin Ass'y (Type E)		
D04	0311160	1S2473D	2 A	L04	4290110	Choke Coil	2 A		2410920	3P Pin Ass'y (Type E)		
D901	0311160	1S2473D		L05	4290280	18mH Inductor	1 B					
D902	0311160	1S2473D		L06	4290011	Peaking Coil	1 B					

5-9. F

Conductor

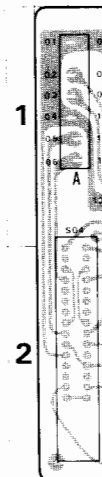
Parts List

Parts No. Stock No.

TR01, 02	0305801
TR03, 04	0306113
TR05, 06	0305731, 2

5-10. F

Conductor



5-11. F

Conductor

(Stock No. 7571471 MODEL QRX-9001)
(Stock No. 7571481 MODEL QRX-8001)

Parts No.	Stock No.	Description	Position
TR01.02	0306270	25C1708 (F)	1 B. 1 A
	or	or	
TR03.04	0306271	25C1708 (G)	1 B. 1 A
	0306270	25C1708 (F)	
	or	or	
	0306271	25C1708 (G)	
TR05.06	0300791	25A899 (B)	1 B. 1 A
	or	or	
	0300792	25A899 (V)	

Parts No.	Stock No.	Description	Position
TR07, 08	0306401 or 0306402	25C1904 (B) or 25C1904 (V)	3 B. 3A
TR09, 10	0305871.2	25C984 (B, C)	2 B. 2A
TR11, 12	0308431 or 0308432	25D381 (M) or 25D381 (L)	2.3B. 2.3A
TR13, 14	0303261 or 0303262	25B536 (M) or 25B536 (L)	2.3B. 2.3A

Parts No.	Stock No.	Description	Position
TR15, 16	0305951 or 0305952	25C945 (Q) or 25C945 (P)	} Transistor
TR17, 18	0300510 or 0300511	25A733 (P) or 25A633 (Q)	
D01, 02	0311160 or 0311180	152473D or 151588	} Diode
D03, 04	0311160 or 0311180	152473D or 151588	
D05, 06	0340120 0311160	VD1212 152473D	
D07, 08	0311160 or 0311180	152473D or 151588	
D09, 10	0311160 or 0311180	152473D or 151588	} Diode
D11, 12	0311160 or 0311180	152473D or 151588	
D13, 14	0311160 or 0311180	152473D or 151588	
D15, 16	0311160 or 0311180	152473D or 151588	
ZD01, 02	0316070	EQA01-24R	1 B. 1 A
R33, 34	0191181	180Ω	} 1/4 W. F.R.
R35, 36	0191479	4.7Ω	
R37, 38	0210392	3.9kΩ	} 1/2 W. M.R.
R39, 40	0192100	10Ω	
R41, 42	0192151	150Ω	3 B. 3 A
R43, 44	0192151	150Ω	1/2 W. F.R.
R47, 48	0192479	4.7Ω	3 B. 3 A
R49, 50	0192479	4.7Ω	3 B. 3 A
VR01, 02	1035350	4.7kΩ (B)	} Semi-Variable Resistor
VR03, 04	1035310	1kΩ (B)	
	2410930	4P Pin Ass'y (Type E)	
	2420520	6P Connector (Type A)	
	5936691	Heat Sink	

(Stock No. 7594371 MODEL QRX-8001 Only)

[illegible]

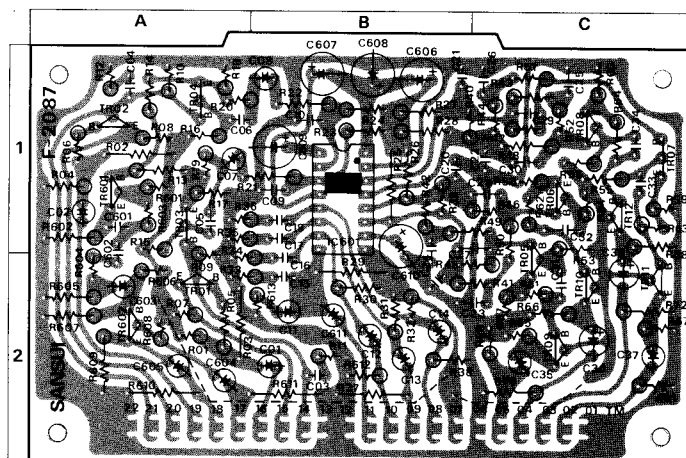
Parts No.	Stock No.	Description	Position
TR ₆₀₁	0306070.1	2SC1313 (F, G) Transistor	2 C
IC ₆₀₁	0360200	BA3125 I.C.	1 C
C ₆₀₁	0573108	0.1 μ F 35WV T.C.	2 C
S ₀₁	1102720	Rotary Switch, SELECTOR	2 B
S ₀₃	1170780	Lever Switch, AUX	2 A
S ₀₄	1170820	Lever Switch, DOLBY ADAPTOR	2 A
S ₁₁	1103570	Rotary Switch, LOUDNESS	2 B, C
	2410590	4P Pin Ass'y (Type D)	
	2410600	6P Pin Ass'y (Type D)	
	2410910	2P Pin Ass'y (Type E)	
	2410920	3P Pin Ass'y (Type E)	

(Stock No. 7594321 MODEL QRX-9001)
(Stock No. 7594391 MODEL QRX-8001)

Parts No.	Stock No.	Description
LD01	0319060	SG2-12C (Red)
LD02-06	0319060	SG2-12C (Red)
		Light Emitted Diode

5-12. F-2087 QS Matrix Circuit Board (Stock No. 7650481 MODEL QRX-9001) (Stock No. 7650531 MODEL QRX-8001)

Conductor Side

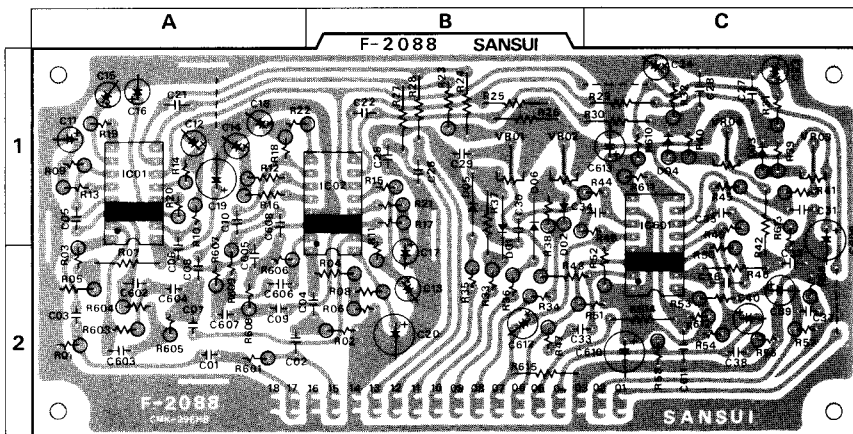


Parts List

Parts No.	Stock No.	Description	Position
TR01	0300470, 1	2SA726 (F, G)	2 A
TR02	0300470, 1	2SA726 (F, G)	1 A
TR03, 04	0306090, 1	2SC1312R (F, G)	1 A
TR05, 06	0306091, 2	2SC1312R (G)	1, 2 C, 1 C
TR07	0306091, 2	2SC1312R (G)	1 C
TR08	0306091, 2	2SC1312S (G)	1 C
TR09, 12	0306090, 1	2SC1312R (F, G)	2 C, 1 C
TR001	0306090, 1	2SC1312R (F, G)	1 A
TR002	0306090, 1	2SC1312R (F, G)	2 A
IC01	0360210	HA1328 I.C.	1 B
C19	0620561	560pF	1 B
C20	0620561	560pF	1 B
C21	0620561	560pF >50V P.C.	1 B
C22	0620561	560pF	1 C
C33	0620561	560pF	1 C
2420520		6P Connector (Type A)	
2420530		8P Connector (Type A)	

5-13. F-2088 QS Phase Discriminator Section Circuit Board (Stock No. 7650491 MODEL QRX-9001) (Stock No. 7650541 MODEL QRX-8001)

Conductor Side



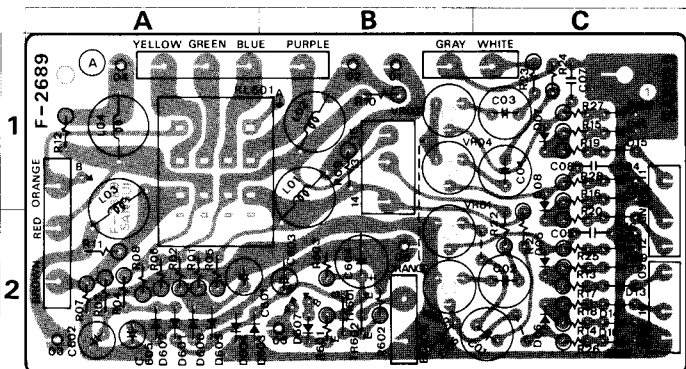
Parts List

Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position
IC01	{ 0360090 or 0360091 or 0360092 }	HA1327 (L) HA1327 (N) HA1327 (H)	1 A	IC02	{ 0360090 or 0360091 or 0360092 }	HA1327 (L) HA1327 (N) HA1327 (H)	1 A

Parts No.	Stock No.	Description	Position
IC01	0360100	HD3103PB I.C.	1, 2 C
D01	0311160	1S2473D	1, 2 B
D02	0311160	1S2473D	1 B
D03	0311160	1S2473D	1 C
D04	0311160	1S2473D	1 C
D05	0311160	1S2473D	1 B
D06	0311160	1S2473D	1, 2 B
C03	0620331	330pF	2 A
C04	0620331	330pF	2 B
C07	0620681	680pF	2 A
C08	0620681	680pF	2 A
C09	0620681	680pF >50V P.C.	2 A
C10	0620681	680pF	1 A
C604	0620471	470pF	2 A
C607	0620471	470pF	2 A
C608	0620471	470pF	1 A
VR01	1035490	1MΩ(B)	1 B
VR02	1035490	1MΩ(B)	1 B
VR03	1035490	1MΩ(B)	1 C
VR04	1035490	1MΩ(B)	1 C
2420530		8P Connector (Type A)	
2420540		10P Connector (Type A)	

5-14. F-2689 Protector Circuit Board (Stock No. 7594341 MODEL QRX-9001) (Stock No. 7594411 MODEL QRX-8001)

Conductor Side

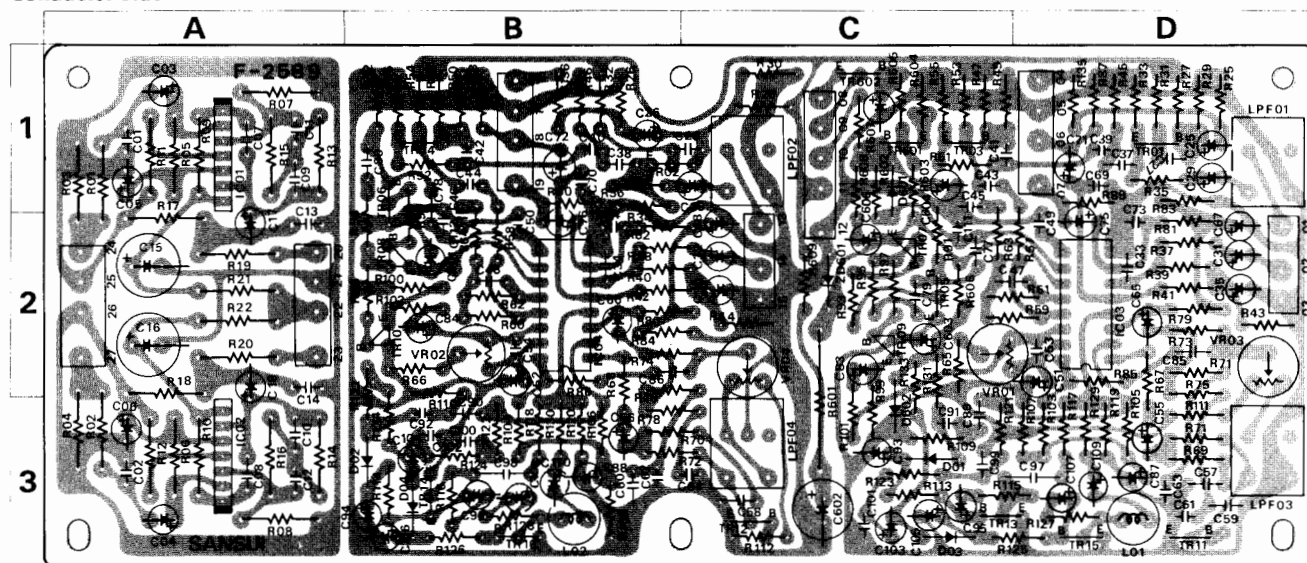


Parts List

Parts No.	Stock No.	Description	Position
TR001	0306131, 2	2SC1364 (6, 7)	2 B
TR002	0306131, 2	2SC1364 (6, 7)	2 B
D01-04	{ 0310330, 1 or 0311180 }	1N60 1S1588	1, 2 C
D05-08	{ 0310330, 1 or 0311180 }	1N60 1S1588	1, 2 C
D09-12	0310330, 1	1N60	1, 2 C
D13-16	0310330, 1	1N60	1, 2 C
D601	0310330, 1	1N60	2 A
D602	0310330, 1	1N60	2 A
D603	0310330, 1	1N60	2 A
D604	0310330, 1	1N60	2 A
D605	0310330, 1	1N60	2 A
D606	0310330, 1	1N60	2 A
D607	0310340	100-1	2 B
R09-12	0103479	4.7kΩ W C.R.	1 B, 1, 2 A
R21-24	0210471	470Ω W N.I.R.	1, 2 C
RL01-04	4290210	Filter Coil	1 A, B
RL01	{ 1150101 or 1150103 }	MY4-02-US RABK-48-DC24V	1 A
VR01-04	1035110	4.7kΩ(B) Semi-Variable Resistor	1, 2 B
2410670		3P Pin Assy (Type F)	
2410920		3P Pin Assy (Type E)	

5-15. F-2589 Equalizer & CD-4 Circuit Board (Stock No. 7551021 MODEL QRX-9001) (Stock No. 7551011 MODEL QRX-8001)

Conductor Side

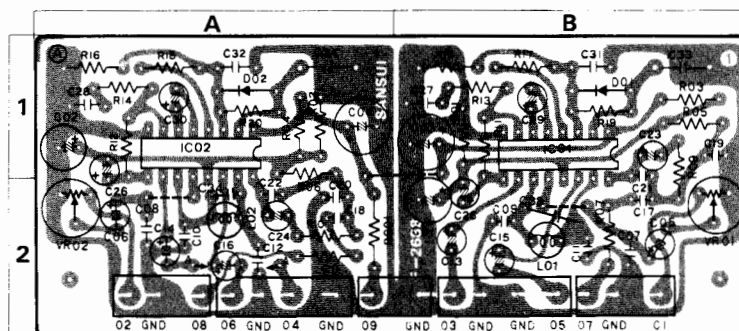


Parts List

Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position
TR01, 02	0306011, 2	2SC1222 (E, F)	1D, 1A, 8	IC01, 02	0360190	BA312	1 A, 3 A 2 D, 2 B	R601	0182151	150Ω 2W Ce.R.	2, 3 C
	or	or		IC03, 04	0360330	CD4-392		L01, 02	4900220	100mH Inductor	3D, 3 B
	0306070, 1	2SC1313 (F, G)	1 C, 1 B	D01, 02	0311160	1S2473D	3 C, 3 B 3 C, 3 B	LF01, 02	0910340	DC-13Q	Ceramic Filter
	or	or		D03, 04	0311160	1S2473D		LF03, 04	4910340	DC-13Q	
TR03, 04	0306011, 2	2SC1222 (E, F)	2 C, 1, 2B	D601	0311160	1S2473D	Diode	VR01, 02	1035130	10kΩ (B)	Semi-Variable Resistor
	or	or			or	or		VR03, 04	1035100	3.3kΩ (B)	
TR05, 06	0305951-3	2SC945 (Q, P, K)	2 C, 2 B		0311160	1S1588	2, 3 C		2410570	3020-5A	5P Pin Ass'y (Type D)
TR07, 08	0300510, 1	2SA733 (P, Q)	2 C, 2 B	D602	0311160	1S2473D			2410580	3020-3A	
TR09, 10	0305951-3	2SC945 (Q, P, K)	2 C, 2 B		or	or	2 C		2410590	3020-4A	4P Pin Ass'y (Type D)
TR11, 12	0305951-3	2SC945 (Q, P, K)	3 D, 3 C	D602	0311160	1S1588					
TR13, 14	0305952	2SC945 (P)	3C, D, 3 B	ZD601	0316290	RD-12E(B)					
TR15, 16	0305952	2SC945 (P)	3 D, 3 B								
TR601	0305951-3	2SC945 (Q, P, K)	1 C								
TR602	0305951-3	2SC945 (Q, P, K)	1 C	C103, 104	0573228	0.22μF	3 C, 3 B				
				C109, 110	0573688	0.68μF	3 D, 3 B				

5-16. F-2688 Dolby Circuit Board (Stock No. 7660081 MODEL QRX-9001 Only)

Conductor Side



Parts List

Parts No.	Stock No.	Description	Position
IC01, 02	0360340	NE545B IC	1 B, 1 A
D01, 02	0310400	1N34A Diode	1 B, 1 A
R601	0201820	82Ω 1W M.R.	2 A
L01, 02	4900260	Inductor	2 B, 2 A
VR01, 02	1035430	100kΩ (B) Semi-Variable Resistor	2 B, 2 A
	2410680	4P Pin Ass'y (Type F)	

5-17. F-2640 Illumination Circuit Board (1)

(Stock No. 7594351 MODEL QRX-9001)
(Stock No. 7594421 MODEL QRX-8001)

Parts List

Parts No.	Stock No.	Description
	7726200	Lamp Ass'y (C) (MODEL QRX-9001 Only)

5-18. F-2641 Illumination Circuit Board (2)

(Stock No. 7594361 MODEL QRX-9001)
(Stock No. 7594431 MODEL QRX-8001)

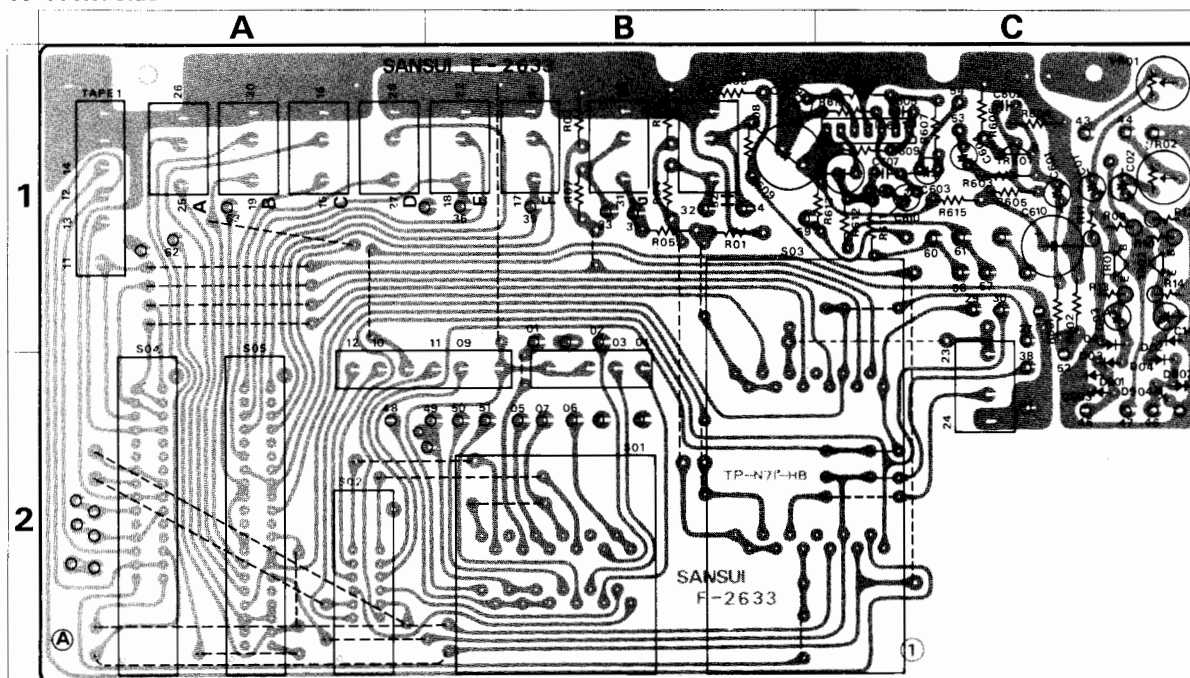
Parts List

Parts No.	Stock No.	Description
R01	0193220	22Ω 1/2W F.R.
	7726210	Lamp Ass'y (D)
	7726200	Lamp Ass'y (C) (MODEL QRX-9001 Only)

5-19. F-2635 4-ch Function Switch & REC CAL Tone Sub Circuit Board (Stock No. 7650471 MODEL QRX-9001) (Stock No. 7650521 MODEL QRX-8001)

5-20. F-2633 Dolby Change Circuit Board (Stock No. 7660061 MODEL QRX-9001 Only)

Conductor Side



Parts List

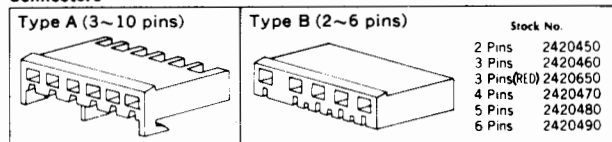
Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position
TR01, 02	0305732 or 0305733 0306070 or 0306071	2SC711 (F) 2SC711 (G) 2SC1313 (F) 2SC1313 (G)	1 C	D03, 04	0310330, 1	1N60	2 C	S04	1170820	Lever Switch, TAPE MONITOR (2 Contact)	2 A
TR01				D901, 902	0310330, 1	1N60		S05	1171000	Lever Switch, TAPE MONITOR (3 Contact)	2 A
TR01			1 C	D903, 904	0310330, 1	1N60			2410590	4P Pin Ass'y (Type D)	
IC01	0360200	BA312S IC	1 C	C01	0573108	0.1μF 35V T.C.	1 C		2410600	6P Pin Ass'y (Type D)	
D01, 02	0310330, 1	1N60 Diode	1 C	VR01, 02	1035410	47kΩ (B) Seme-Variable Resistor	1 C		2410670	3P Pin Ass'y (Type F)	
				S01	1102720	Rotary Switch, SELECTOR	2 B				
				S02	1105230	Rotary Switch, AUX	2 A				
				S03	1170780	Lever Switch, DOLBY NR	1, 2 B C				

5-21. F-2686 4-ch Function Switch & REC CAL Tone Sub Circuit Board (Stock No. 7650511 MODEL QRX-9001) (Stock No. 7650561 MODEL QRX-8001)

5-22. F-2652 Dolby Sub Circuit Board (Stock No. 7660071 MODEL QRX-9001 Only)

5-23. Figures Connectors & Pin Ass'y

Connectors

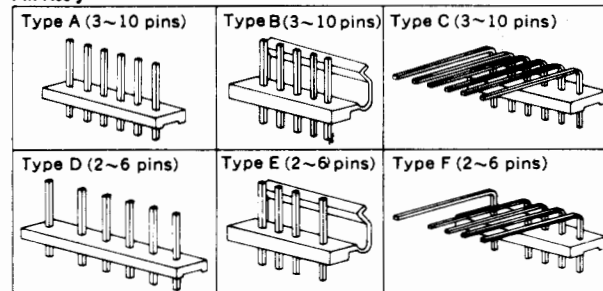


NOTE: Since stock number of female connectors (type B) with wires are not shown in each parts list of Complete circuit board, please refer to the above parts list when ordering the connector.

Abbreviations

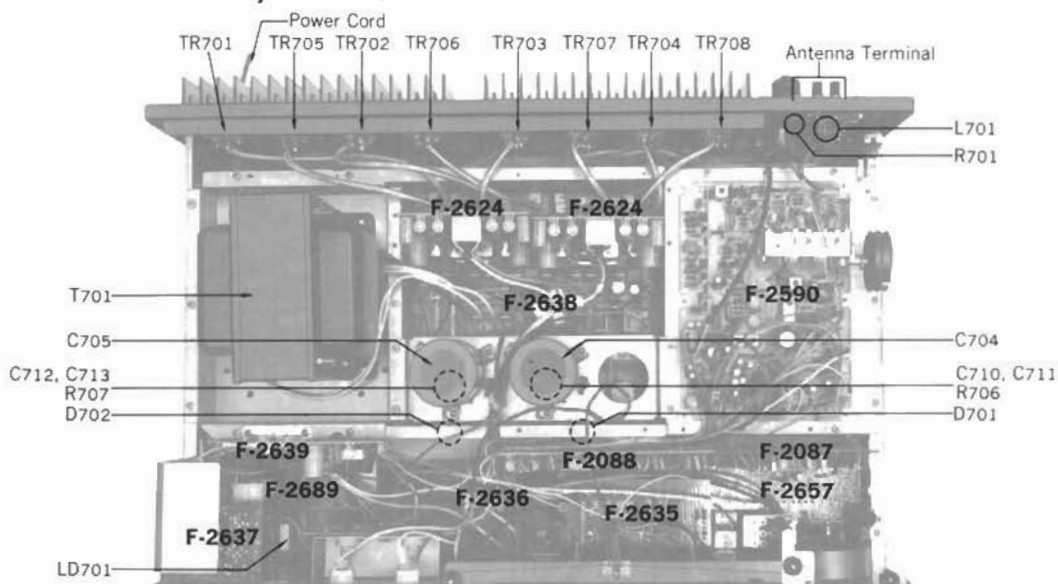
C.R. : Carbon Resistor	E.C. : Electrolytic Capacitor
S.R. : Solid Resistor	BP.E.C.: Bi-Polar Electrolytic Capacitor
Ce.R. : Cement Resistor	C.C. : Ceramic Capacitor
M.R. : Metallized Film Resistor	Mi.C. : Mica Capacitor
F.R. : Fusing Resistor	O.C. : Oil Capacitor
N.I.R. : Non-Inflammable Resistor	P.C. : Polystyrene Capacitor
M.C. : Mylar Capacitor	T.C. : Tantalum Capacitor

Pin Ass'y

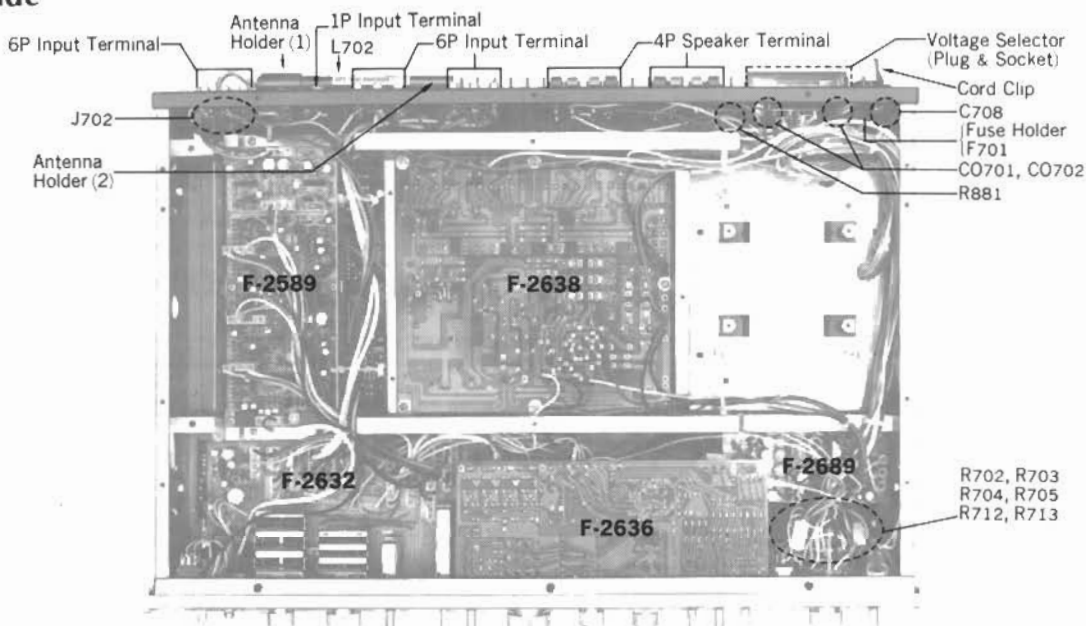


6. OTHER PARTS/6-1. QRX-8001

Top Side



Bottom Side



Parts List (Top Side & Bottom Side)

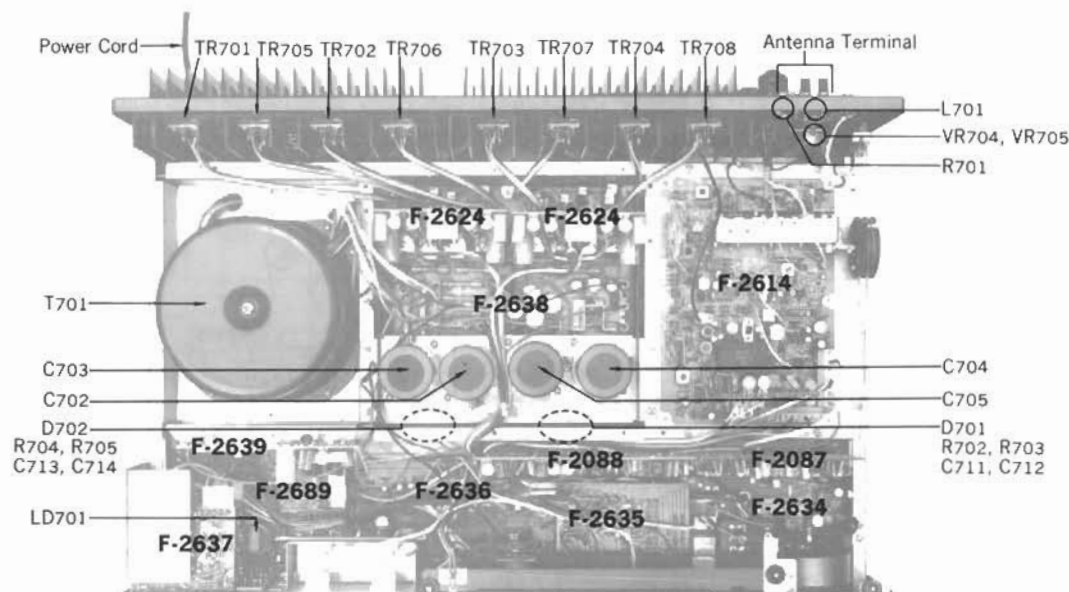
Parts No.	Stock No.	Description
TR701-704	0303430 or 0303431	258611 (B) 258611 (C)
TR705-708	0308600 or 0308601	250581 (B) 250581 (C)
D701	0311440	SG-51 (S)
D702	0311450	SG-51 (R)
LD701	0319090	Light Emitted Diode
C704	0559350	15000- μ F 50V E.C.
C705	0559350	15000- μ F 50V E.C.
C707	0605337	0.033- μ F 250V M.C.
C708	0659802	0.0047- μ F 150V C.C.
C712-713	0655103	10000 pF 500V C.C.
R701	0103122	1.2k Ω 1/2W Ce.R.

Parts No.	Stock No.	Description
R702-705	0163221	220 Ω 3W Ce.R.
R706	0202332	3.3k Ω 2W M.R.
R707	0202332	3.3k Ω 2W M.R.
R712	0201122	1.2k Ω 1W N.R.
R713	0201392	3.9k Ω 1W N.R.
R881	0114335	3.3M Ω 1/2W S.R.
L701	4290021	75 Ω /300 Ω Antenna Transformer
L702	4200830 or 4200831	ARS-26 235- μ H 6G-013 265- μ H Bar Antenna
T701	4002510	Power Transformer
F701	0432500 0432280 2300060	7A 125V (AC 100-120V) 4A 125V (AC 220-240V) Fuse Holder
CO701, 702	2450060	AC Outlet

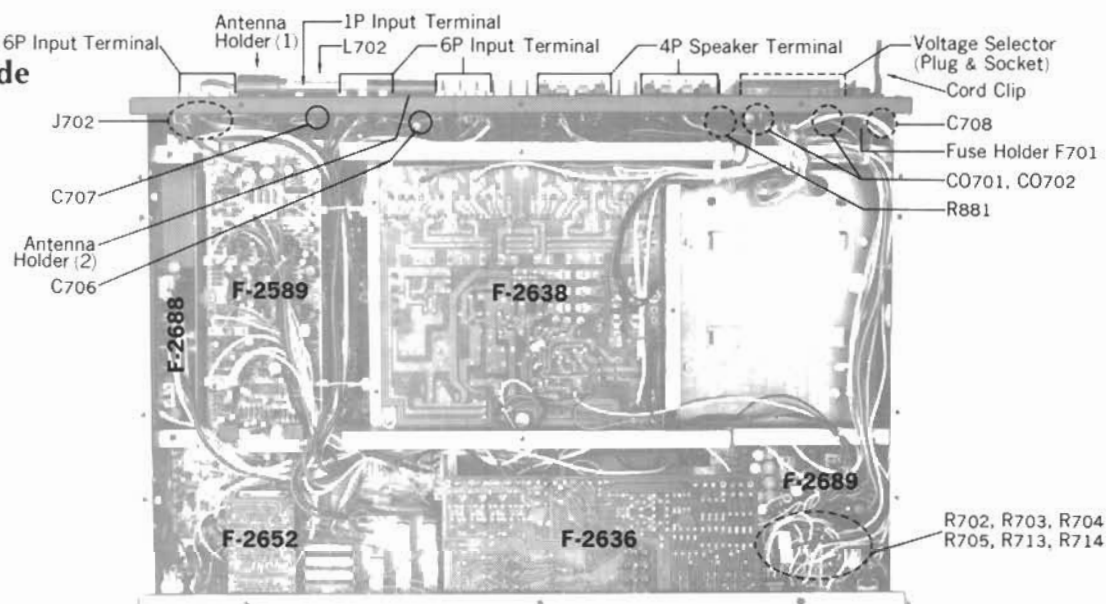
Parts No.	Stock No.	Description
J702	2430041	5P DIN Jack
	2030040	Transistor Socket
	2200290	1P Output Terminal
	2200330	6P Input Terminal
	2210310	Antenna Terminal
	2290160	4P Speaker Terminal
	2200320	4P Input Terminal
	2410091	Voltage Selector, plug
	2410830	Voltage Selector, socket
	2230052	Ground Terminal
	3800010	Power Cord
	3910490	Cord Clip, power cord
	5286480	Antenna Holder (1)
	5286450	Antenna Holder (2)

6-2. QRX-9001

Top Side



Bottom Side



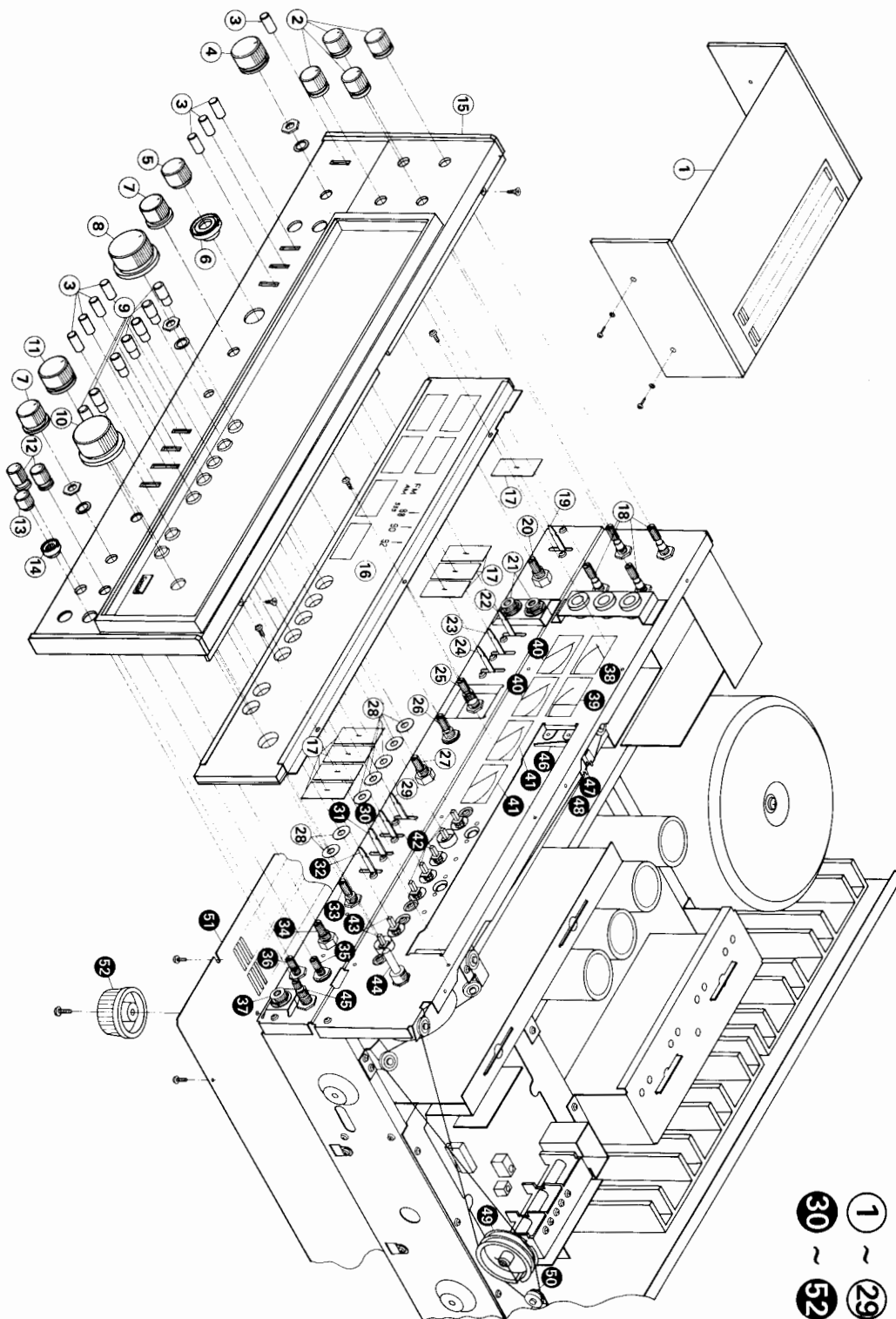
Parts List (Top Side & Bottom Side)

Parts No.	Stock No.	Description
TR701-704	0306230	25C1115 (P)
	or	
	0306231	25C1115 (O)
	0300870	25A746 (P)
TR705-708	0300871	25A746 (O)
D701	0311440	SG-5T (S)
D702	0311450	SG-5T (S)
LD701	0319090	Light Emitted Diode
C702, 703	0559360	10000 pF 50V E.C.
C704, 705	0559360	10000 pF 50V E.C.
C707	0605337	0.033 pF 250V M.C.
C708	0659802	0.0047 pF 150V C.C.
C711-714	0655103	10000 pF 500V C.C.
R701	0103122	1.2kΩ 1/2W C.R.

Parts No.	Stock No.	Description
R702-705	0163221	220Ω 3W Ce.R.
R706, 707	0202332	3.3kΩ 2W M.R.
R712	0202152	1.5kΩ 2W Ce.R.
R713	0201392	3.9kΩ 1W Ce.R.
R881	0114335	3.3MΩ 1/2W S.R.
VR704, 705	1005300, 1	5kΩ CD-4 Adjust Volume
T701	4002500	Power Transformer
L701	4290021	75Ω/300Ω Antenna Transformer
	4200830	235μH AR5-26 Bar Antenna
	or	
	4200831	265μH 6G-013 Bar Antenna
F701	2300060	Fuse Holder
	0432290	SA 125V (AC 220-240V)
	0434060	10A 250V (AC 100-120V)

Parts No.	Stock No.	Description
J702	2430041	5P DIN Jack
	2030040	Transistor Socket
	2200290	1P Output Terminal
	2200330	6P Input Terminal
	2210310	Antenna Terminal
	2290160	4P Speaker Terminal
	2410091	Voltage Selector plug
	2410830	Voltage Selector socket
	3800010	Power Cord
	3910490	Cord Clip power cord
	2230052	Ground Terminal
	2200320	4P Input Terminal
	5286480	Antenna Holder (1)
	5286450	Antenna Holder (2)

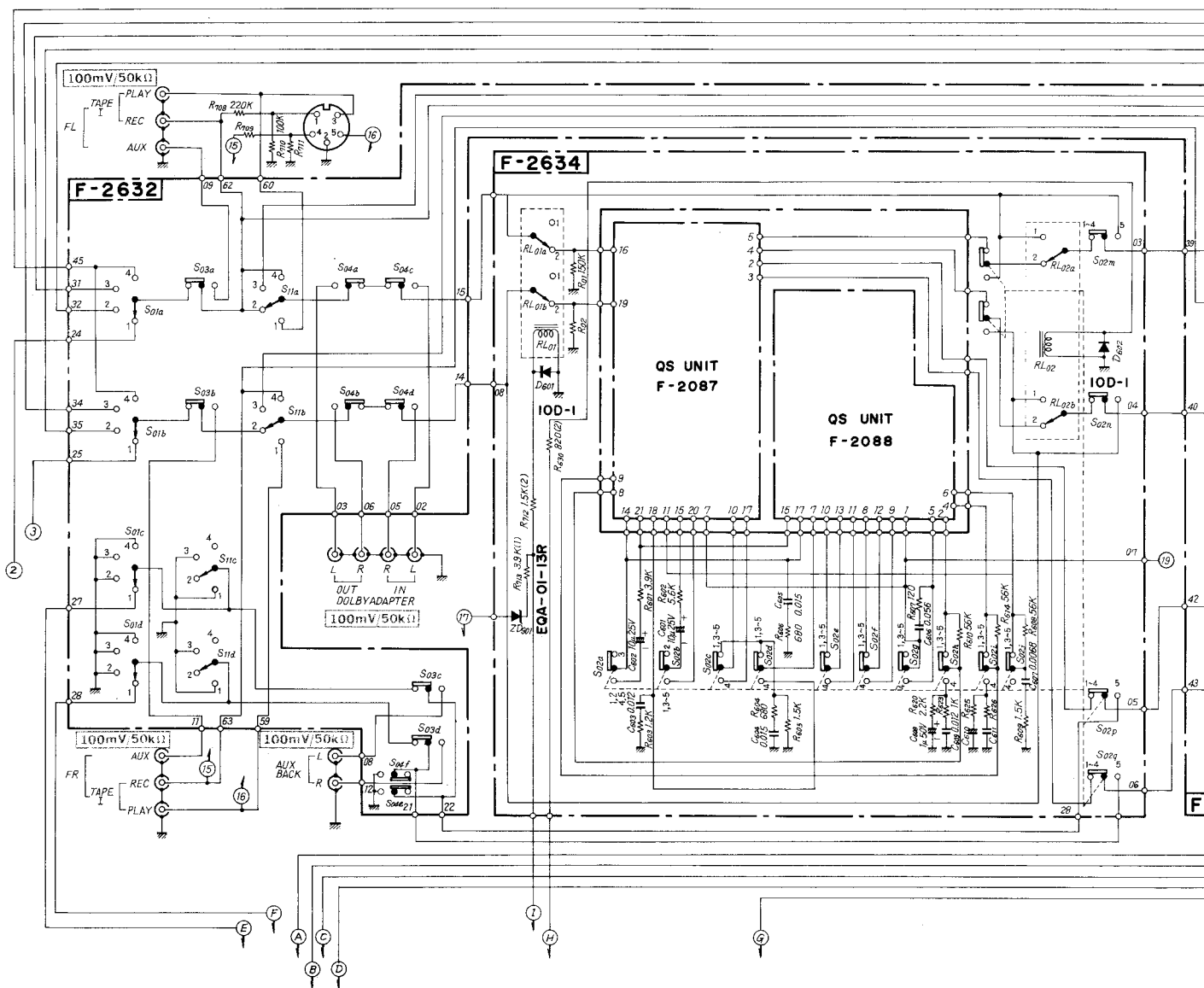
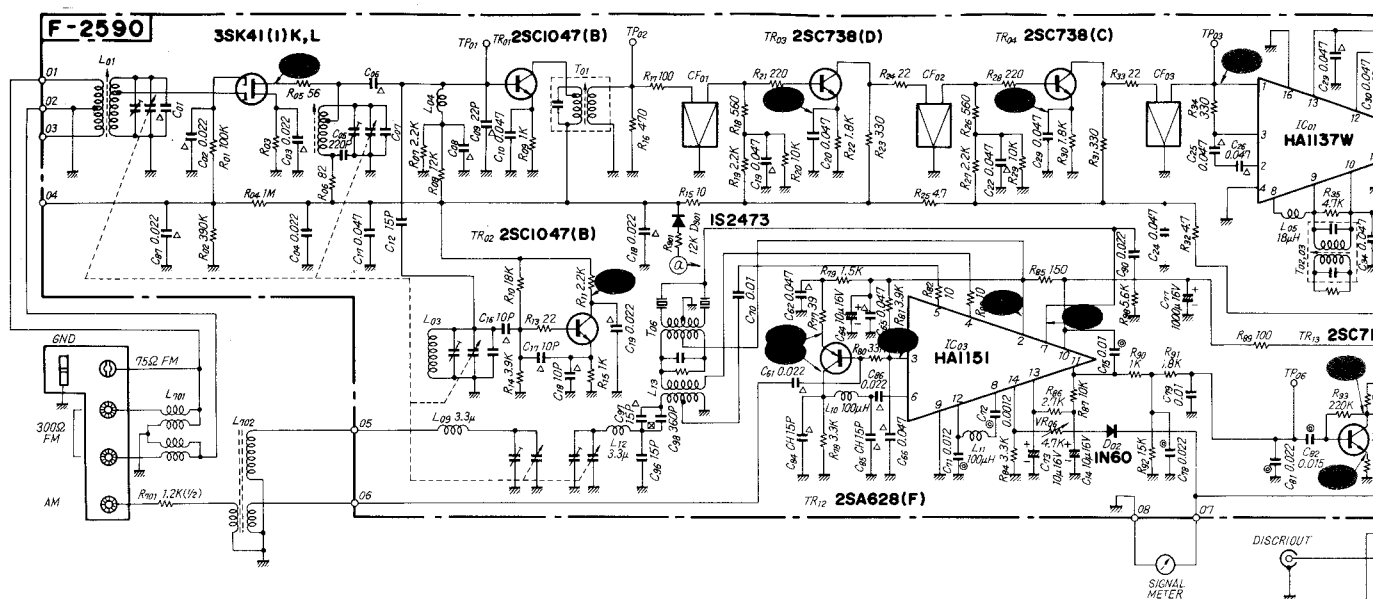
6-3. Exploded View (QRX-8001/9001)



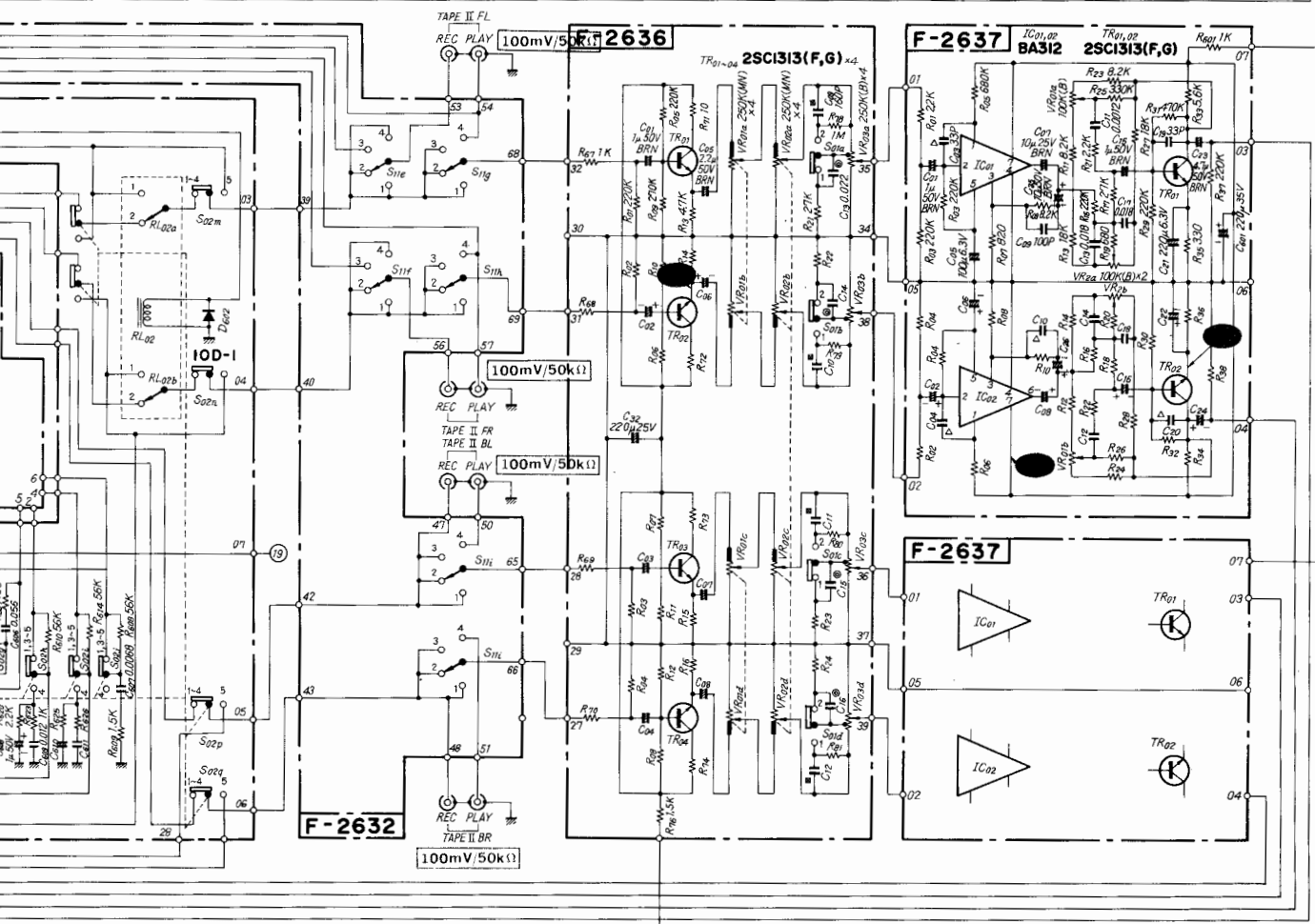
Parts List

[illegible]

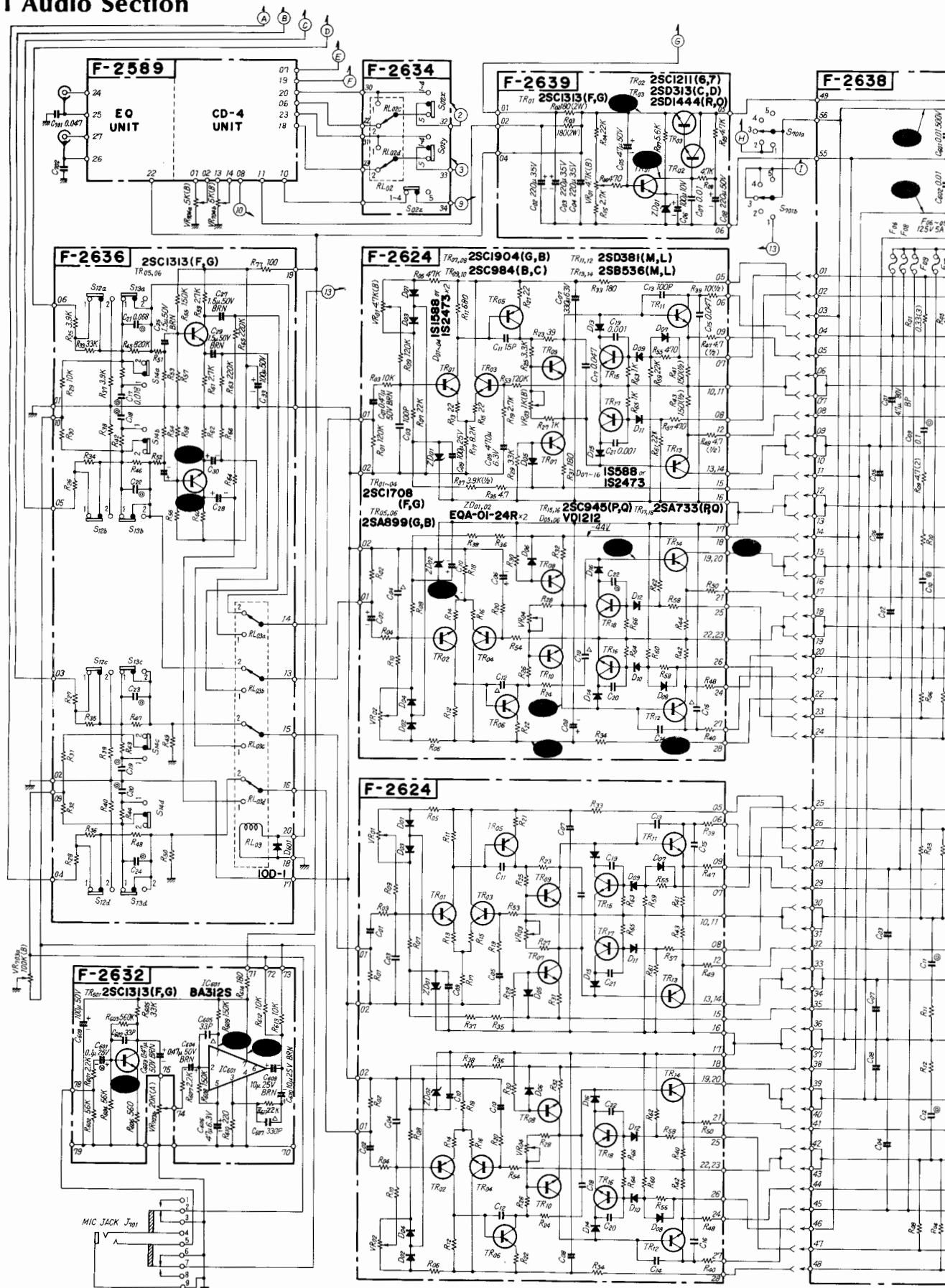
7. SCHEMATIC DIAGRAM/7-1. QRX-8001 Tuner Section



-

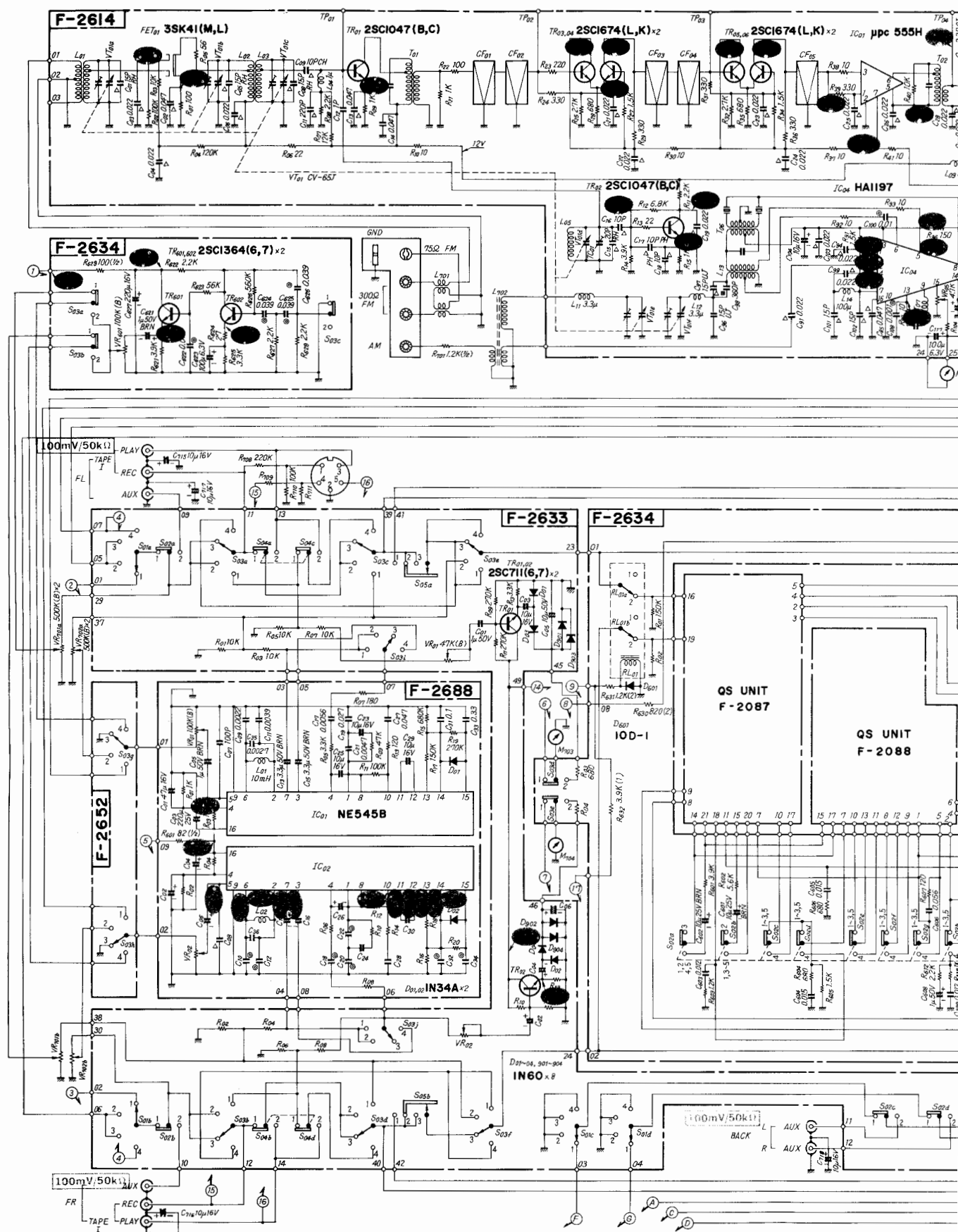


7-2. QRX-8001 Audio Section

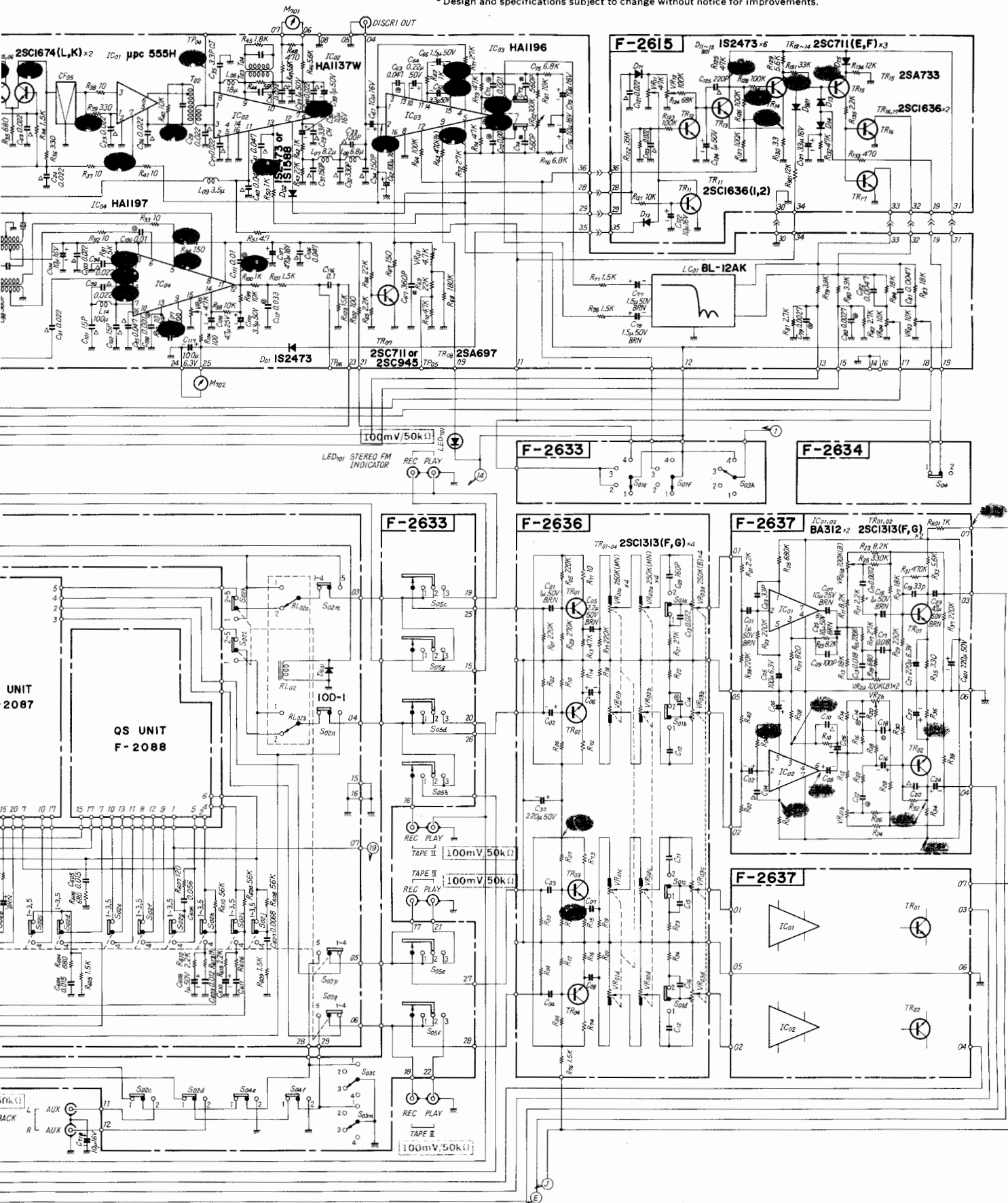




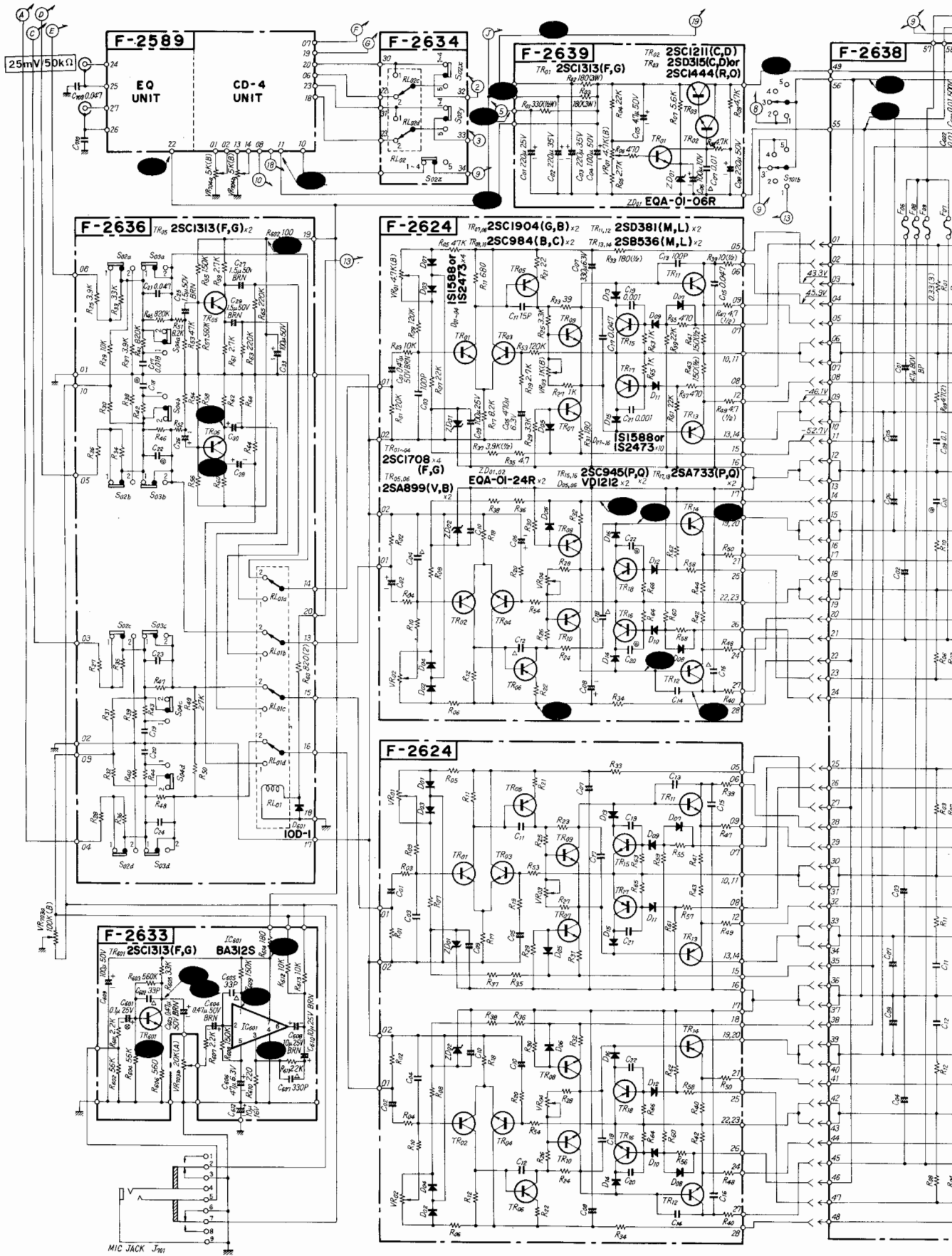
7-3. QRX-9001 Tuner Section



- * La présentation et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.
- * Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.
- * Design and specifications subject to change without notice for improvements.



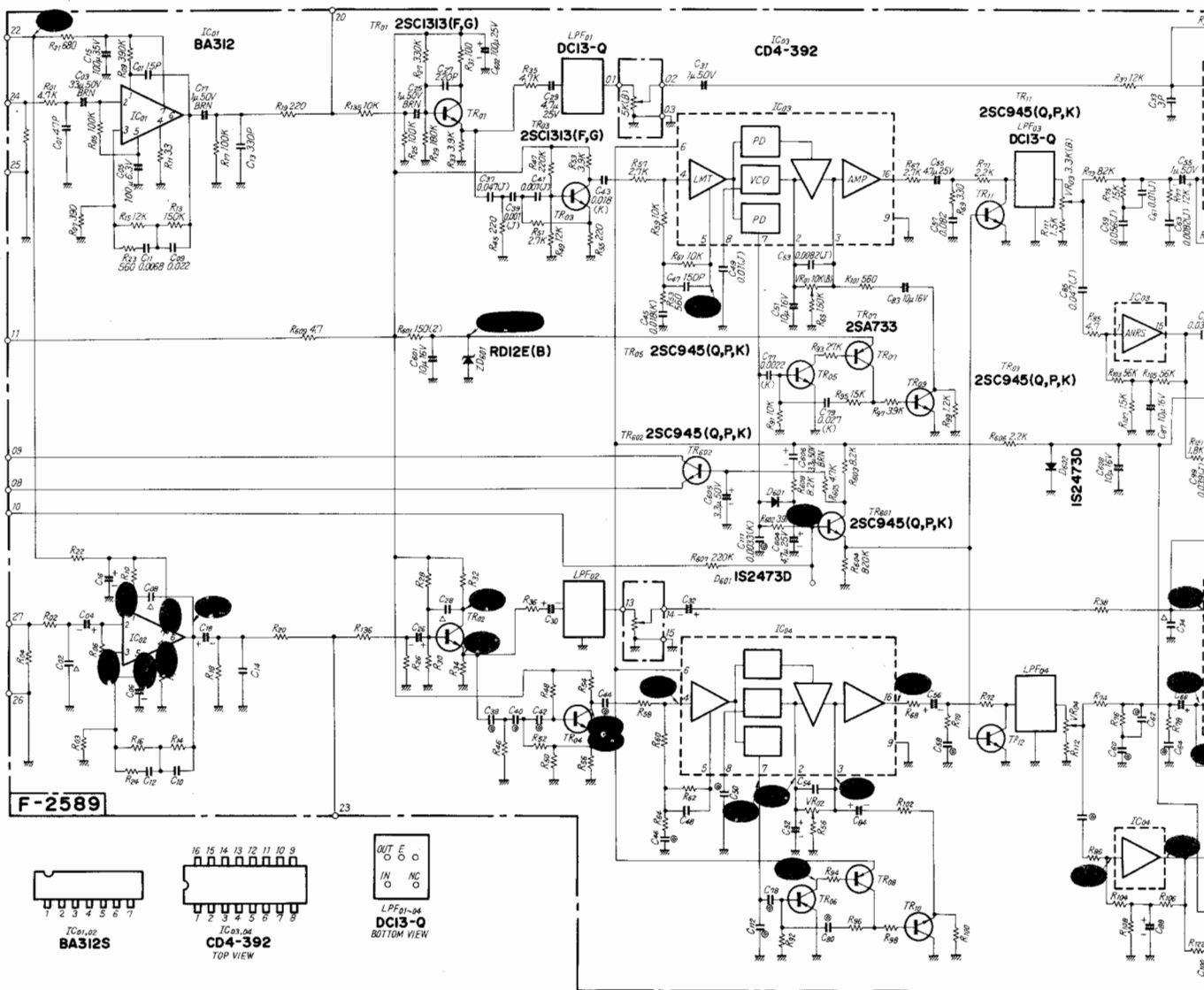
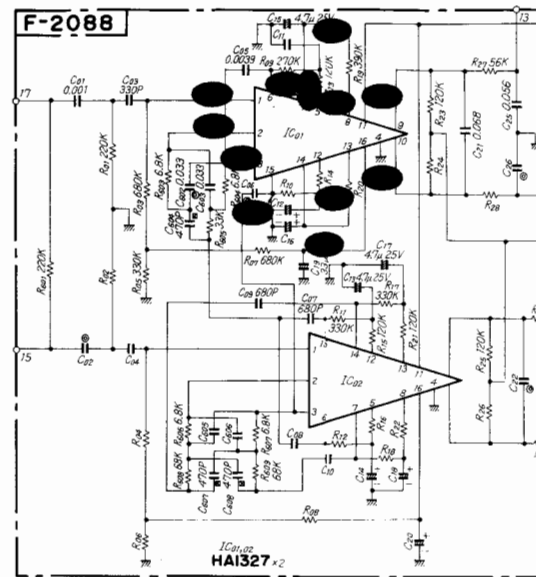
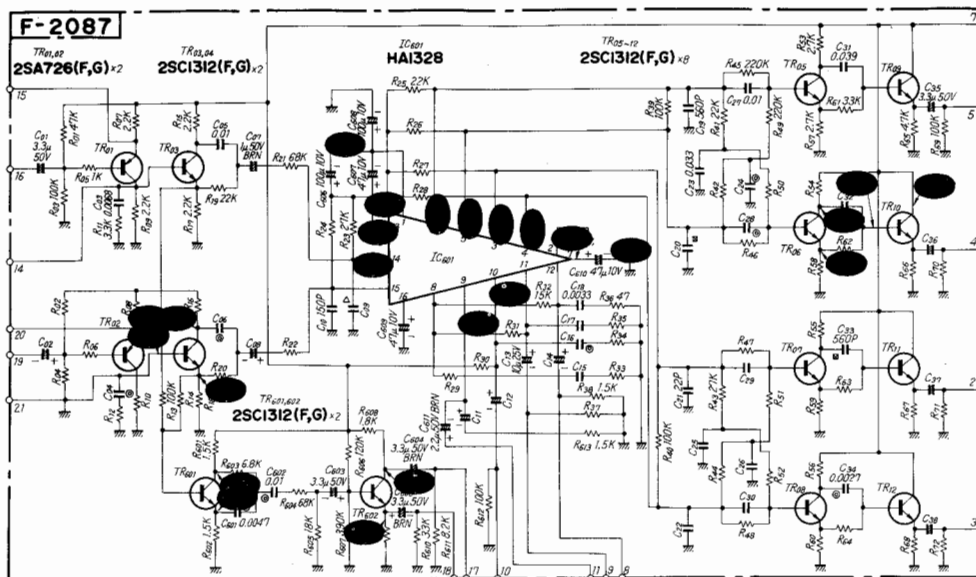
7-4. QRX-9001 Audio Section



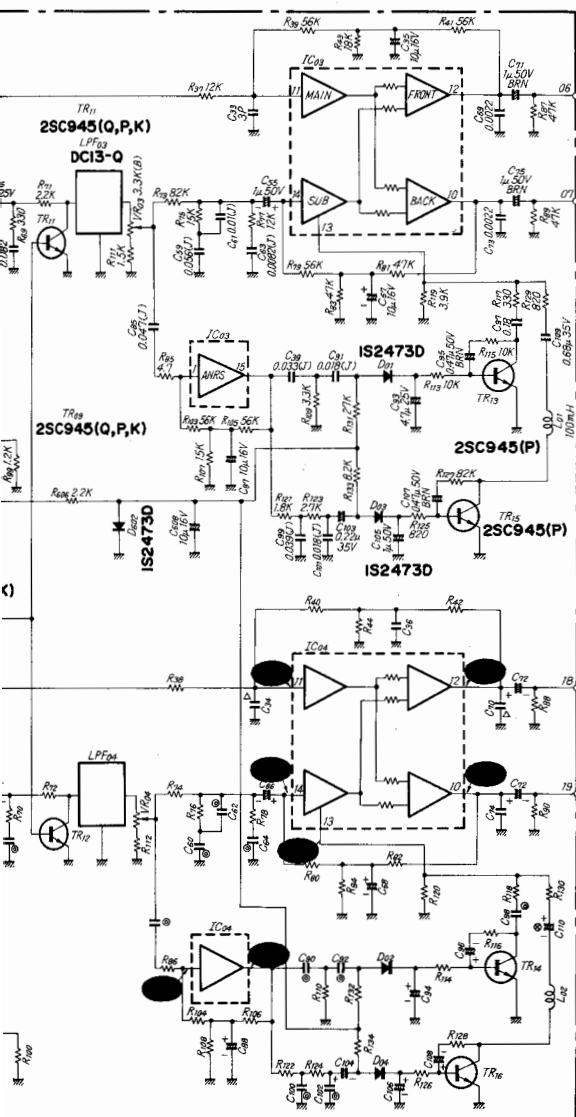
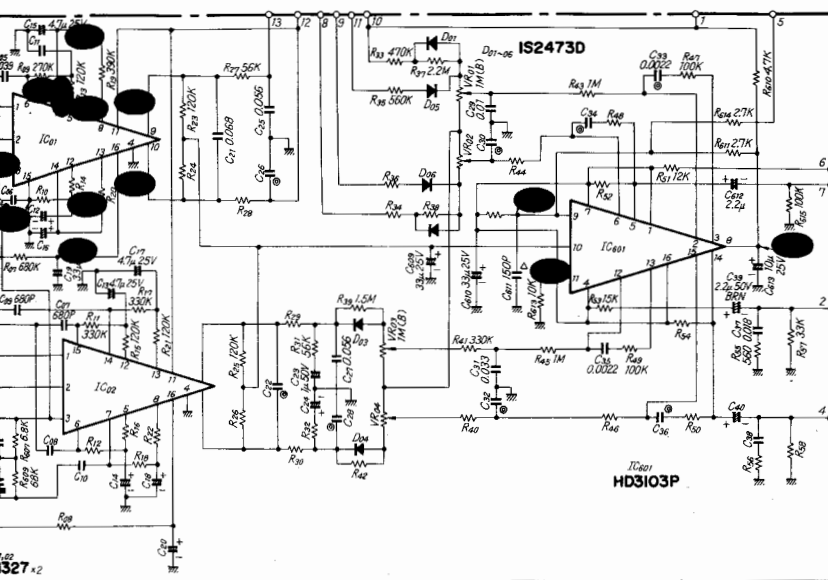


7-5. QRX-8001/9001 4-Channel Section

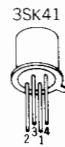
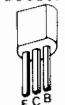
• La présentation et les spécifications sont susceptibles d'être modifiées sans préavis.
• Änderungen, die dem technischen Fortschritt entsprechen, sind vorbehalten.
• Design and specification subject to change without notice.



présentation et les spécifications sont susceptibles d'être modifiées sans préavis par suite d'améliorations éventuelles.
 nderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.
 sign and specification subject to change without notice for improvements.



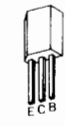
2SA733
2SB560
2SC945
2SC1047
2SC1222
2SC1364
2SC1674



2SC733
2SC735



2SC1636-1



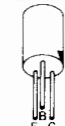
2SB536
2SD313
2SD381



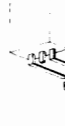
2SA899
2SC1904



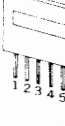
2SC984



2SD356



BA 312



2SA128
2SA726
2SC711
2SC738
2SC1211
2SC1312
2SC1313
2SC1708



2SA746
2SB611
2SC1115
2SC1444
2SD581



PC555H

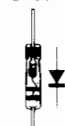


HA 1196 HA 1137W
HA 1197 CD4392
HA 1327 HD3103PB
HA 1328 NE545B

HA-1151



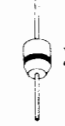
1N34A
1N60



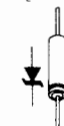
10DC 1



10D 1



RD12EB
RD13EB
RD62E
EQA01-06R
EQA01-13R
EQA01-24R



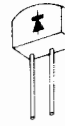
VD1212



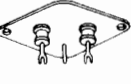
IS2473D
IS1588



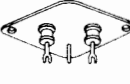
10DC-1R



SG5TS



SG5TR

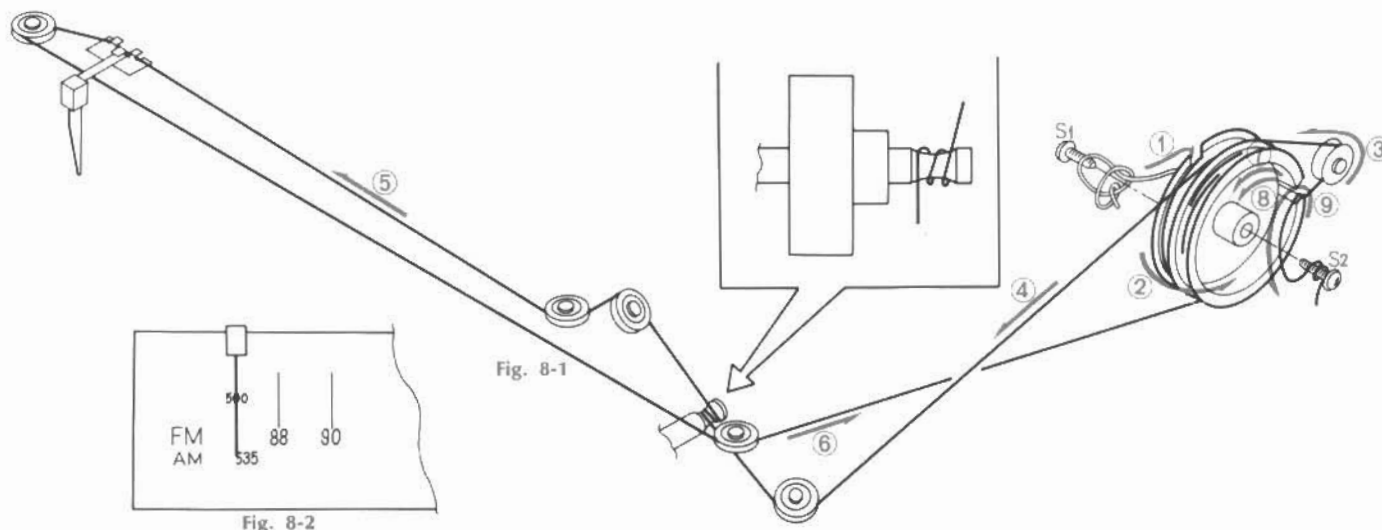


8. THREADING OF DIAL CORD

*If a dial cord is cut off or slips, replace it by following procedures.

As this units use 0.6mm ϕ cord, please replace it with the same type certainly.

*The length of dial cord is approximately 190cm (74 inch).



8-1. Threading of Dial Cord

Thread the dial cord in numerical order from ① to ⑨ as Fig. 8-1.

- 1) Close the variable capacitor completely (Max. capacitance).
- 2) Tie dial cord to the screw, S1 of the dial pulley.
- 3) Thread cord in the direction of arrow from ① to ⑨
- 4) After ⑨, tie the cord to the screw S2 of the dial pulley.

8-2. Attachment of Dial Pointer

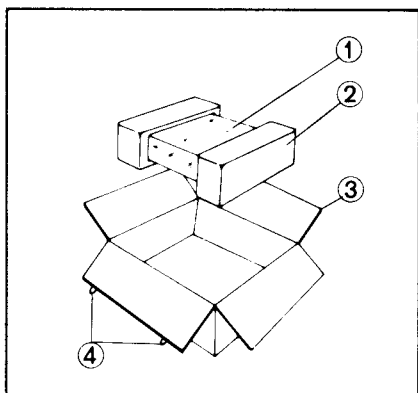
- 1) Close the variable capacitor completely.
- 2) Set the dial pointer as Fig. 8-2.

*Confirm that the dial pointer runs smoothly on the dial scale by turning the tuning shaft.

Stock No.	Description
6036050	Dial Cord (0.6mm ϕ)
6146670	44 Type Pulley

9. PACKING LIST

Parts No.	Stock No.	Description
1	9116631	Vinyl Cover
2	9028010	Styrofoam Packing
3	9009290	Carton Case (MODEL QRX-8001)
	9009280	Carton Case (MODEL QRX-9001)
4	5996080	Curl Stopper



10. ACCESSORY PARTS LIST

Stock No.	Description
9202400	Operating Instructions (MODEL QRX-8001)
9202410	Operating Instructions (MODEL QRX-9001)
9237440	Schematic Diagram (MODEL QRX-8001)
9237430	Schematic Diagram (MODEL QRX-9001)
9416010	CD-4 Adjustng Record (MODEL QRX-9001)

Sansui

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